

# **EXHIBIT 103**

**Redacted Version of Document Sought to be Sealed**

**Full 30(b)(6) Deposition Transcript of  
Michael Clark,  
dated May 18, 2022**

UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA

IN RE: FACEBOOK, INC., MDL No. 2843  
CONSUMER USER PROFILE Case No.  
LITIGATION 18-md-02843-VC-JSC

-----  
This document relates to:  
ALL ACTIONS  
-----

ZOOM DEPOSITION OF FACEBOOK's 30(b)(6)  
CORPORATE REPRESENTATIVE - MICHAEL PATRICK CLARK  
(Reported Remotely via Video & Web Videoconference)  
Denver, Colorado (Deponent's location)  
Wednesday, May 18, 2022  
Volume I

STENOGRAPHICALLY REPORTED BY:  
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PAGES 1 - 251

UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA

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DEPOSITION OF MICHAEL PATRICK CLARK,  
taken on behalf of the Plaintiffs, with the  
deponent located in Denver, Colorado, commencing at  
10:07 a.m., Wednesday, May 18, 2022, remotely  
reported via Video & Web videoconference before  
REBECCA L. ROMANO, a Certified Shorthand Reporter,  
Certified Court Reporter, Registered Professional  
Reporter.

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## I N D E X

DEPONENT EXAMINATION  
 MICHAEL PATRICK CLARK PAGE  
 VOLUME I

BY MS. WEAVER 15

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NUMBER PAGE

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25	/////		

1 Denver, Colorado; Wednesday, May 18, 2022

2 10:07 a.m.

3 ---o0o---

4  
5 THE VIDEOGRAPHER: We're on the record. 10:07:40

6 It's 10:07 a.m. Mountain Time on May 18th, 2022.

7 This is the deposition of Mike Clark, and  
8 we're here in the matter of In Re: Facebook, Inc.

9 Consumer Privacy User Profile Litigation. I'm

10 John Macdonell, the videographer, with Veritext. 10:07:57

11 Before the reporter swears the witness,  
12 would counsel please identify themselves, beginning  
13 with the noticing party, please.

14 MS. WEAVER: Good morning. This is  
15 Lesley Weaver of Bleichmar Fonti & Auld, and I 10:08:10  
16 represent the plaintiffs.

17 I am taking this deposition today with  
18 the assistance of Josh Samra of my firm. And also  
19 present are my able co-counsel, Cari Laufenberg and  
20 Emma Wright of -- sorry -- of Keller Rohrbach. 10:08:25

21 MR. BLUME: Good morning. Rob Blume from  
22 Gibson, Dunn & Crutcher on behalf of Facebook.

23 Here today with Rose Ring,  
24 Martie Kutscher Clark and Mike Ulmer, as well  
25 Ian Chen from the client. 10:08:42

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1 SPECIAL MASTER GARRIE: This is 10:08:50  
2 Special Master Garrie. I'm here on behalf of the  
3 Court.

4 THE COURT REPORTER: At this time, I will  
5 ask counsel to agree on the record that there is no 10:08:54  
6 objection to this deposition officer administering  
7 a binding oath to the deponent via remote  
8 videoconference, starting with the noticing  
9 attorney, please.

10 MS. WEAVER: Yes, no objection. 10:09:15

11 MR. BLUME: No objection from Facebook.

12 THE COURT REPORTER: Mr. Clark, If you  
13 could raise your right hand for me, please.

14 THE DEPONENT: (Complies.)

15 THE COURT REPORTER: You do solemnly 10:09:20  
16 state, under penalty of perjury, that the testimony  
17 you are about to give in this deposition shall be  
18 the truth, the whole truth and nothing but the  
19 truth?

20 THE DEPONENT: I do. 10:09:20

21

22

23

24

25 ///// 10:09:35

1                               MICHAEL PATRICK CLARK,                               10:09:38  
2       having been administered an oath, was examined and  
3       testified as follows:

4  
5                               EXAMINATION                               10:09:38  
6       BY MS. WEAVER:

7               Q.     Good morning, Mr. Clark. I'm  
8       Lesley Weaver, and I'll be taking your deposition  
9       today.

10                    Would you mind stating, for the record,                    10:09:44  
11       your full name and your place of employment.

12               A.     Sure.

13                    It's Mike Clark. My legal name is  
14       Michael Patrick Clark. Place of employment is  
15       Facebook or Meta.                               10:10:01

16               Q.     And in what city are you currently  
17       employed?

18               A.     I'm a remote employee from Menlo Park,  
19       California, living in Denver, Colorado.

20               Q.     Thank you.                               10:10:15  
21                    How long have you worked for Facebook?

22               A.     A little over three years.

23               Q.     And what's your current role and title?

24               A.     Title is director of product management.

25               Q.     And have you always held that title?                    10:10:29

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1 A. I was a product manager when I started. 10:10:32

2 | About the same level the whole time.

3 Q. What is a product manager?

4	A. A product manager -- product manager	
5	helps pull together the specifications for both	10:10:51

6 user experience, the requirements for internal  
7 Facebook developers, and business case and  
8 definition for products built by Facebook.

9	Q. And what products have you managed at	
10	Facebook?	10:11:14

11 A. I have worked in privacy the entire time.

12	Q. And is privacy a product at Facebook?
----	--

13           A.    The -- there is a privacy organization  
14    and there are privacy-related products that are  
15    part of that. 10:11:33

16 Q. And are there specific privacy-related  
17 products that you have focused on in your  
18 employment at Facebook?

19 A. Yes. Currently, I support the org. I  
20 take care of the privacy infrastructure teams. 10:11:46

21	Q. And what is privacy infrastructure?
----	--

22	A. Yeah. Privacy infrastructure is where we	
23	build centralized infrastructure to enable Facebook	
24	internal developers to have common central	
25	solutions to solve for privacy. That might include	10:12:08

1 deletion. Also includes retention, data 10:12:14  
2 minimization, purpose limitation, scraping,  
3 anti-scraping efforts as well.

4 Q. And who heads the privacy infrastructure  
5 team? 10:12:36

6 A. Could you be more -- the product  
7 organization or the product team or the -- there --  
8 there are multiple -- there are multiple roles  
9 associated with privacy infrastructure. I lead the  
10 product management of privacy infrastructure. 10:12:56

11 Q. Understood. And I'll put a pause on  
12 that. Thank you for answering that question.

13 Do you understand today that you are  
14 testifying on behalf of Facebook as a corporate  
15 representative? 10:13:09

16 A. Yes, I do.

17 Q. And have you seen the deposition notice  
18 in this case?

19 A. I have.

20 Q. Okay. And you're here to testify with 10:13:16  
21 regard to topic 4; is that correct?

22 A. That is correct.

23 Q. Do you understand that topic 4 is  
24 Facebook's processes of pseudonymization,  
25 de-identification, re-identification, association, 10:13:30

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1 and deletion of user data and information; is that 10:13:34  
2 your understanding?

3 A. That is my understanding.

4 Q. Okay. And have been deposed before,  
5 Mr. Clark? 10:13:46

6 A. I have.

7 Q. How many occasions have you been deposed?

8 A. A total of seven.

9 Q. Have all of those depositions been in  
10 connection with your employment at Facebook? 10:13:54

11 A. No. No, they have not.

12 Q. To what, in general, did all seven  
13 depositions relate?

14 A. One was related to a car accident that I  
15 was a passenger in as a teenager. The second were 10:14:08  
16 telecommunications company I worked for were  
17 disputes around billing and access rights to  
18 physical infrastructure.

19 And then the other four have been at  
20 Facebook. 10:14:32

21 Q. And in what matters have you been deposed  
22 as part of your employment at Facebook?

23 A. I've been deposed on matters relating to  
24 the anti-scraping efforts and enforcement that we  
25 had taken, in three of the four depositions. 10:14:54

1 Q. And what was the fourth deposition? 10:14:56

2 A. The -- the fourth deposition was

3 [REDACTED]

4 [REDACTED]

5 [REDACTED] 10:15:11

6 do you mean?

7 [REDACTED]

8 [REDACTED]

9 Q. And when was that deposition?

10 A. That was November or December of last 10:15:26

11 year.

12 Q. And what was the subject matter of your

13 testimony in that deposition, in general?

14 [REDACTED]

15 [REDACTED] 10:15:42

16 Q. And what did you discuss in that

17 deposition as subject matter, specifically?

18 MR. BLUME: Object -- objection. Scope,  
19 generally.

20 THE DEPONENT: The -- it was -- it was 10:15:57

21 specifically about the assessment and my -- and --

22 and the role of privacy infrastructure in the

23 broader assessment.

24 Q. (By Ms. Weaver) And what specific

25 privacy infrastructure were you testifying about? 10:16:17

1	A. I -- it was controls and safeguards	10:16:21
---	--	----------

2 associated with privacy infrastructure.

3 Q. Did it include anonymization or

4 pseudonymization of data?

5           A.     It did not include anonymization or                               10:16:35

6 pseudonymization.

7	Q. What did it include?
---	-------------------------

8           A.     It included the broader controls and

9 | safeguards associated.

10	Q. And what controls and safeguards,	10:16:47
----	--------------------------------------	----------

11 specifically, if not anonymization and

12	pseudonymization?
----	-------------------

13 MR. BLUME: Objection. Scope, generally.

14 THE DEPONENT: It included the broader

15	set of safeguards that include data life cycle	10:17:03
----	--	----------

16 management. That included scraping and TPM.

17 Q. (By Ms. Weaver) When you say "data life  
18 cycle management," does that include data deletion?

19           A.    That does include data deletion.

20	Q. What else does data life cycle management	10:17:24
----	--	----------

21	include?
----	----------

22	A. Data retention.
----	--------------------

23	Q. Anything else?
----	-------------------

24	A.	No.
----	----	-----

25	Q. Okay.	10:17:38
----	----------	----------



1 A. That is fair. 10:18:58

2 Q. Okay. If you answer my question, I'm  
3 going to assume that you understood what I was  
4 asking; is that fair?

5 A. That is fair. 10:19:08

6 Q. Okay. What did you do to prepare for  
7 your deposition today?

8 A. I reviewed materials and had interviews  
9 with individuals, with counsel.

10 Q. With whom did you have interviews? 10:19:25

11 A. I spoke with Scott Renfro.  
12 Yiannis Papagiannis. P-A-P-A-G-I-A-N-N-I-S is how  
13 you spell the last name.

14 Mayur Patel. Eugene Zarashaw,  
15 Z-A-R-A-S-H-A-W. Ryan Borker, B-O-R-K-E-R. 10:19:48

16 Will Shackleton, S-H-A-C-K-L-E-T-O-N. And  
17 Hannes Roth. H-A-N-N-E-S and then R-O-T-H.

18 Q. Anyone else?

19 A. No.

20 Q. When you spoke with those seven 10:20:25  
21 individuals, was counsel present for each  
22 conversation?

23 A. Yes.

24 Q. And how long did you speak with each of  
25 them? 10:20:31

1           A.    I -- I don't have exactly how much time I           10:20:36  
2           spent with them. Between those interviews and  
3           counsel, approximately 35 hours.

4           Q.    And what did you discuss with Mr. Renfro?

5           A.    I discussed some of the historical and --           10:20:59  
6           and past functionality of the deletion framework.

7           Q.    And when you say the "deletion  
8           framework," what are you referring to?

9           A.    Software related to deletion  
10          functionality at Facebook.                           10:21:19

11          Q.    Thank you.

12                Mr. Renfro is currently an employee, is  
13          that right, of Facebook?

14          A.    That is correct.

15          Q.    And what is his title?                       10:21:28

16          A.    Yes.

17                I do not know his title.

18          Q.    Do you know what his current role is?

19          A.    His -- I -- I actually don't know his  
20          exact role or title.                               10:21:47

21          Q.    Do you know his --

22          A.    He's a -- he's a -- his past role is as a  
23          software engineer. I don't know what his current  
24          title or role.

25          Q.    How long did you speak with Mr. Renfro?           10:21:59



1           A.    I did not keep an exact accounting of the           10:22:01  
2           amount of time I spoke with Mr. Renfro.  
3           Potentially an hour.

4           Q.    Okay. Well, so as not to be too  
5           exhausting, can you give me a rough estimate, for           10:22:13  
6           each of the seven individuals you named, how  
7           many -- how much time you spent talking to each of  
8           them and generally what the subject matter was?

9           A.    Sure.

10           For Yiannis Papagiannis, a total of           10:22:29  
11           roughly an hour. Spoke to Yiannis about current  
12           deletion software functionality. And his  
13           experience in learnings and observations from the  
14           time that he's been here, which was longer than  
15           myself. Yiannis's title is an engineering manager.           10:22:55

16           Mayur Patel, probably spent a total of an  
17           hour and a half with, discussing questions that I  
18           had regarding some of the technical functionality  
19           of some of the systems and current processes for  
20           how they operate, roughly -- and Mayur is a           10:23:41  
21           software engineer.

22           Eugene, probably 30 minutes, if even  
23           that, and was for historical context on past  
24           functionality of deletion software. Eugene is  
25           formerly a software engineer. I do not know his           10:24:14

1 current title. 10:24:16

2 Ryan Borker was also around between  
3 15 minutes and a half hour. And spoke with Ryan  
4 about schematization. And Ryan is a product  
5 manager. 10:24:46

6 Will Shackleton, spent about 20 minutes  
7 with, and spoke to -- about past versions of  
8 deletion software. And spoke to Will for a  
9 half hour.

10 And Hannes was also between 15 minutes 10:25:25  
11 and a half hour. And spoke to about schematization  
12 as well. And Hannes is a software engineer.

13 Q. And what is schematization?

14 A. Schematization is a process of  
15 classifying data storage systems. 10:25:48

16 Q. And what is, in general, Facebook's  
17 schematization in this case, particularly as  
18 relevant to the topics you discussed with people in  
19 preparation for this deposition?

20 A. Specifically, the deletion framework, the 10:26:09

21 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

25 Q. Got it. 10:26:33

1                   So to recap briefly, you spoke with                   10:26:34  
2                   Mr. Renfro for about an hour. Mr. Papagiannis for  
3                   about an hour. Mr. Patel for about an hour and a  
4                   half. We're at about three and a half.

5                   Then Mr. Zarashaw for about 30 minutes.                   10:26:50  
6                   And let's say 30 minutes for the -- each for the  
7                   remaining four, so that's two -- so you spent about  
8                   seven hours substantively preparing for this  
9                   deposition. And then you said you spent 35 hours  
10                  preparing.                   10:27:05

11                  Was the remainder of the time spent  
12                  talking to counsel?

13                  A. Yes, in addition to 20 of -- hours of my  
14                  own time reviewing material.

15                  Q. And what materials did you review for                   10:27:14  
16                  20 hours?

17                  A. Yeah. I -- I reviewed approximately  
18                  45 documents. The UDDP. The relevant deletion  
19                  controls from 2012 to present. PwC's audits from  
20                  2013 to 200- -- I believe '17. Wiki's describing                   10:27:33  
21                  the technical details of deletion and the software  
22                  associated with. And then also reviewed the  
23                  25 documents which you had provided.

24                  Q. And when you say you reviewed PwC's  
25                  audits, what specifically are you referring to?                   10:27:56

1           A.     There were audits of the controls in that           10:28:04  
2     time frame, and it was the -- at that time the  
3     third-party assessment of those controls associated  
4     with the 2012 FTC order.

5           Q.     What was the focus of PwC's audit during           10:28:21  
6     that time frame?

7           MR. BLUME:   Objection.   Scope.

8           THE DEPONENT:   Yeah, I can only speak to  
9     what I observed in -- in reading, which was the --  
10    the privacy controls.   10:28:39

11          Q.     (By Ms. Weaver)   And when you say the  
12    "privacy controls," what do you mean, specifically?

13          A.     There were controls that were identified  
14    that -- which I had reviewed from 2012 to present,  
15    and it was the audit of those controls.                       10:28:57

16          Q.     Right.

17                 And which controls specifically are you  
18    referring to?

19          A.     Controls associated with deletion.

20          Q.     Anything else?                                   10:29:11

21          A.     Focused primarily on the controls  
22    associated with deletion.

23          Q.     What's your understanding of why PwC  
24    focused an audit on privacy controls relating to  
25    deletion?   10:29:28

1 MR. BLUME: Objection. Scope. And 10:29:29  
2 privilege.  
3 So to the extent you know by speaking to  
4 counsel, I'd instruct you not to answer.  
5 THE DEPONENT: I don't know that I 10:29:39  
6 understand the question.  
7 Q. (By Ms. Weaver) Sure.  
8 You said you spent 20 hours reviewing  
9 documents, including PwC's audits.  
10 And then you testified that the focus of 10:29:48  
11 the PwC audits, with regard to privacy controls,  
12 were controls associated with deletion; is that  
13 correct?  
14 A. I -- just to clarify. I didn't just  
15 spend 20 hours on the PwC. Those were -- those 10:30:01  
16 were some of the documents in that time.  
17 Q. Right.  
18 And I'm asking you, having read those PwC  
19 audits, what did you --  
20 A. Yes. 10:30:11  
21 Q. -- learn from those documents relating to  
22 why PwC was auditing Facebook's privacy controls  
23 associated with deletion?  
24 A. They were auditing, as part of the  
25 requirements associated -- as I understand, and 10:30:26

1 from what I read, associated with the 2012 FTC 10:30:29  
2 order.

3 Q. And when you say the "2012 FTC order,"  
4 what are you referring to?

5 A. I don't know how else to label that. 10:30:41  
6 The -- the FTC agreement between Facebook and the  
7 FTC in 2012.

8 Q. And what did the agreement relate to, in  
9 your understanding?

10 A. In -- in my understanding and review of 10:30:52  
11 it, agreements to privacy practices and for those  
12 privacy practices to be audited.

13 Q. And specifically, with regard to the  
14 controls associated with deletion, what is your  
15 understanding, based on your review and preparation 10:31:11  
16 for this deposition, of what the -- what PwC was  
17 focused on?

18 MR. BLUME: Objection. Scope.

19 THE DEPONENT: To the best of my  
20 understanding, the area that I reviewed was their 10:31:25  
21 observations associated with controls associated  
22 with deletion.

23 Q. (By Ms. Weaver) What were those  
24 observations?

25 A. I would actually want to pull those up so 10:31:36

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1 | that I could speak to them directly -- 10:31:39

2 Q. Which documents --

3 (Simultaneously speaking.)

4 THE DEPONENT: -- if you'd like to go

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5 | through this -- 10:31:43
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6 Q. (By Ms. Weaver) I -- I -- I understand.

7 But I'm entitled to your recollection. And you've

8 | said now you looked at them for 20 hours in

9 association with other documents.

10	What's your understanding, as you sit	10:31:50
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11 here today, as Facebook's corporate representative,

12 of the privacy controls associated with deletion

13 |       that PwC was investigating?

14 MR. BLUME: Object to form.

15	THE DEPONENT: I did --	10:32:02
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16 MR. BLUME: Hold on.

17 THE DEPONENT: Sorry.

18 MR. BLUME: Objection. Form and scope.

19 THE DEPONENT: I -- I do want to clarify.

20	I didn't spend 20 hours reading the PwC	10:32:07
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21 documents. I just want to make sure that that's

22	accurate.
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23 For the time that I did spend reading

24 |       them, one that comes directly to mind would be the

25	2017 audit, where specifically, as I refer to my	10:32:18
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1 notes, where the -- found -- PwC found no issues 10:32:24  
2 relating to deletion on Facebook.

3 And the 2017 to 2019 also finds no issues  
4 relating to deletion on Facebook that -- yeah, I  
5 mean -- those -- those were at very high levels 10:32:53  
6 what I -- those are what I remember from  
7 recollection.

8 If we go back further to 2013, where PwC  
9 was testing privacy controls, also found no  
10 deletion -- no issues relating to deletion. 10:33:07

11 In the 2013 to 2015 audit, as well, also  
12 identified no direct issues relating to deletion on  
13 Facebook.

14 Q. (By Ms. Weaver) And you appear to be  
15 reading from a document; is that right, Mr. Clark? 10:33:25

16 A. Yup. As I mentioned, I -- I was looking  
17 at my notes.

18 Q. And what are these notes?

19 A. These were notes that I handwrote just  
20 because of the timeline that I needed to cover and 10:33:36  
21 to make sure that I just have something to refresh  
22 my recollection.

23 Q. When did you create these notes?

24 A. Last night.

25 MS. WEAVER: We would request immediate 10:33:49



1 production of them, Counsel. 10:33:50

2 Q. (By Ms. Weaver) And had you taken any  
3 notes that are incorporated in what you're  
4 reviewing before last night?

5 A. In -- no. 10:34:03

6 Q. Did anybody assist you in the preparation  
7 of these notes?

8 A. No. I typed them myself.

9 Q. And when you typed them, were you looking  
10 at handwritten notes? 10:34:12

11 A. No, I was not. I typed -- I typed them  
12 up from the 45 documents and 25 documents -- 45  
13 documents, and then the 25 provided by you to -- to  
14 create and generate these notes.

15 MS. WEAVER: Okay. Mr. Blume, will you 10:34:33  
16 produce those as soon as possible, please.

17 MR. BLUME: We will.

18 MS. WEAVER: I mean, we can take a break.  
19 You're sitting in the room with him. So why don't  
20 we take a break and you can have them copied and 10:34:43  
21 then we'll take a look.

22 Go off the record.

23 THE VIDEOGRAPHER: Off the record. It's  
24 10:34 a.m.

25 (Recess taken.) 10:34:52

1 THE VIDEOGRAPHER: Okay. We're back on 10:53:53  
2 the record. It's 10:53 a.m.

3 MR. BLUME: I'm sorry. If I could just  
4 note, we produced what's been Bates-labeled -- this  
5 is Rob Blume -- ADVANCE-META -- a document -60 to 10:54:04  
6 -65.

7 It's Facebook's position that those notes  
8 are not obligated to be produced at this time,  
9 although we did so out of courtesy to Ms. Weaver.

10 MS. WEAVER: Duly noted and appreciated. 10:54:22  
11 And I've taken just a quick moment here  
12 to review the notes, which we will mark as  
13 Exhibit 1 [sic], when Mr. Samra has a moment here.  
14 I do think they will facilitate the taking of the  
15 deposition. So we'll mark those for now and just 10:54:39  
16 set them aside.

17 (Exhibit 339 was marked for  
18 identification by the court reporter and is  
19 attached hereto.)

20 Q. (By Ms. Weaver) Mr. Clark, what is your 10:54:52  
21 understanding of what the word "pseudonymization"  
22 means?

23 A. Are we back on the record?

24 Q. Yes.

25 A. Okay. 10:55:02

1 Q. Sorry. We're back on the record and 10:55:03  
2 you're under oath.

3 I'll ask the question again.

4 Mr. Clark, what's your understanding of  
5 the -- what the word "pseudonymization" means? 10:55:12

6 A. The term "pseudonymization" is a term  
7 where its -- its -- its technical meaning is to  
8 create an additional identity from a source  
9 identity.

10 Specifically, in the case that we are 10:55:33  
11 talking about here, pseudo- -- pseudonymization

12 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] 10:55:55

16 Q. And when you say "identifier," what do  
17 you mean?

18 A. Identifier can have a broad set of

19 [REDACTED]

[REDACTED] 10:56:10

21 speaking of, an identifier is -- it's -- it's  
22 something to -- a number or some kind of technical  
23 concept to map back to some kind of identity of --  
24 of something else.

25 [REDACTED] 10:56:33

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Q. And when you say "Facebook user ID," is that -- written in a shorthand at Facebook?

10:56:50

A. I -- I apologize. One word broke out when you asked that question. Can you repeat that.

Q. No problem.

How does Facebook refer to the Facebook user ID?

10:57:05

A. The Facebook user ID, which is an internal use, it's for internal Facebook developers only to use. We refer to it as the canonical user identifier.

ordinarily?

10:57:23

Q. Are there other ways to refer to it?

MR. BLUME: Objection. Form.

THE DEPONENT: User ID. Facebook user ID.

10:57:36

Q. (By Ms. Weaver) Any other way?

A. Those -- those are the ones that I know of offhand.

Q. So -- apologies.

10:57:48

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Q. And what other identifiers are you aware  
of in use at Facebook that are used for processes  
of pseudonymization?

10:58:07

A. Purely for the sake of pseudonymization,

Q. And then --

A. That's one example.

10:59:13

MR. BLUME: Objection. Form.

THE DEPONENT: Could you ask that more  
specifically.

10:59:28

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1 Q. (By Ms. Weaver) I'm just asking, is the 10:59:30

2 [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED] 11:00:05

11 MR. BLUME: Objection. Form.

12 THE DEPONENT: The -- I'm -- I'm trying

13 to figure out the right way to answer that question

14 because it's -- it -- it -- in a data warehouse,

15 you have unstructured data that might be a log, for 11:00:29

16 instance. And if there was a user ID in that log

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED]

21 [REDACTED]

22 Q. (By Ms. Weaver) Perfect. Thank you.

23 What does the word de-identification

24 mean?

25 A. De-identification is the process of 11:01:23

1 taking and stripping identity from -- 11:01:30  
2 generically -- generic technical definition is, is  
3 taking any identifiers or stripping any identifiers  
4 out of a set of data so it's not identifiable.

5 Q. And what is re-identification? 11:01:50

6 A. Re-identification is a process that --  
7 using the generic technical definition -- where a  
8 set of data that while not directly identifiable,  
9 there is some process by which data can be tied  
10 back to some original identity. 11:02:14

11 Q. Great.

12 And what about association in this  
13 context?

14 MR. BLUME: Objection. Form.

15 THE DEPONENT: Association and -- as you 11:02:29  
16 say in this context, can you clarify what you mean.

17 Q. (By Ms. Weaver) Sure.

18 Topic 4, to which -- for which you're the  
19 corporate representative, seeks information about  
20 Facebook's processes of a number of things, 11:02:42  
21 including association of user data and information.

22 In that context, what does association  
23 mean?

24 A. Thank you.

25 Q. Sure. 11:02:54

1           A.    The word "association" in that context is           11:02:54  
2    how -- I -- I asked the question because  
3    association has specific technical meaning in  
4    Facebook's systems, in addition to the generic  
5    technical use of the word is where data can be           11:03:07  
6    associated or identified back to an original user  
7    identifier.

8           Q.    Okay. And then what does deletion mean,  
9    as you understand it, with regard to topic 4?

10          A.    Deletion, as I understand it, in regards       11:03:37  
11    to topic 4 is the -- the Facebook processes by  
12    which we -- when a user requests an individual  
13    object or their accounts to be deleted, that --  
14    that their -- that the obligations of that deletion  
15    are met.   11:03:58

16          Q.    When data is deleted at Facebook, does  
17    that mean it no longer exists or can it also mean  
18    that the associations or identifications no longer  
19    connect a user to the data?

20               MR. BLUME: Objection. Form.                   11:04:25

21               THE DEPONENT: Can -- that felt like a  
22    couple of questions.

23               Can you -- can you be more specific.

24          Q.    (By Ms. Weaver) Yeah. I'm actually just  
25    trying to lay it out so you can see where I'm           11:04:34



1 headed. 11:04:37

2 A. Okay.

3 Q. So does deletion at Facebook mean the  
4 data no longer exists?

5 A. When data is deleted at Facebook, the -- 11:04:45  
6 the data itself is gone or is no longer  
7 identifiable in any way back to the user.

8 Q. So sometimes deletion could mean that the  
9 data still exists. But the way to identify or  
10 associate data with a user has just been 11:05:07  
11 eliminated; is that fair?

12 MR. BLUME: Objection. Form.

13 [REDACTED]

14 [REDACTED]

15 Q. (By Ms. Weaver) Why not? 11:05:19

16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED] [REDACTED]

21 [REDACTED]

22 If there is a log entry that includes --

23 I'll use my own name as an example -- that includes

24 my own user identifier, when it's first uploaded,

25 my IP address, maybe some device information, 11:05:54

1 things that would be necessary for the normal 11:05:58  
2 operation and debugging of any issues that might  
3 have popped up, and that there was a photo uploaded  
4 [REDACTED]  
[REDACTED] [REDACTED]  
[REDACTED] [REDACTED]  
[REDACTED] [REDACTED]  
[REDACTED] [REDACTED]  
[REDACTED] [REDACTED]  
[REDACTED] [REDACTED]  
[REDACTED] [REDACTED]  
[REDACTED] [REDACTED]  
[REDACTED] [REDACTED]  
[REDACTED] [REDACTED]  
[REDACTED] [REDACTED]  
15 associated general descriptor of, for example, this 11:06:42  
16 is data from 2007 from Facebook users, in general?  
17 MR. BLUME: Objection. Form. Objection.  
18 Form.  
19 THE DEPONENT: In form I -- I -- I don't  
20 know that I would agree with exactly how that would 11:07:03  
21 state.  
22 Like in the example I used, it would be  
23 photo upload logs. But the 2007 would be past  
24 retention periods, and so I wouldn't expect, per  
25 our policies, for that to exist. 11:07:18

1 Q. (By Ms. Weaver) Let me do this. Let's 11:07:30  
2 keep walking through our definitions, and I'm going  
3 to come back to this issue when I think we have a  
4 better way to communicate about it.

5 The first question is, did you refer to 11:07:37  
6 that data that's not associated -- that still  
7 physically exists, but it is not associated, is  
8 there a different way to refer to that than just  
9 deleted data?

10 MR. BLUME: Objection. Form. 11:07:58

11 THE DEPONENT: Yeah, I -- that -- that  
12 data is de-identified.

13 MS. WEAVER: Okay. Perfect. That's what  
14 I was hoping for.

15 I'll ask you to now turn to 11:08:21  
16 Exhibit Share. And we've marked a couple of  
17 exhibits while -- and when I say "we," Josh Samra  
18 has marked a couple of exhibits while we were  
19 chatting, and I believe it's Exhibit 339.

20 Q. (By Ms. Weaver) And do you know, 11:08:40  
21 Mr. Clark, about how you have to kind of refresh  
22 Exhibit Share to have exhibits show up?

23 A. Let me see how I can make that work.

24 Q. Okay.

25 A. I think I've got it right here. 11:08:50

1                   Could you repeat for me the exhibit                   11:08:52  
2                   number.  
3                   Q.     Yes.    It's 339.  
4                   I see, though, it starts with an  
5                   Exhibit 1.  You should disregard that.  That was                   11:08:57  
6                   done in error at my instruction, and we will remove  
7                   it from the file.  
8                   A.     I'm waiting for it load.  
9                   MS. WEAVER:  Okay.  And, actually, you'll  
10                  see there are two exhibits while we're waiting.                   11:09:10  
11                  For the record, Exhibit 339 is a copy of  
12                  the document just produced by Facebook bearing  
13                  Bates numbers ADVANCED-META-60 through -65, and  
14                  bearing the words "Mike Clark Deposition Notes."  
15                  (Exhibit 340 was marked for                   11:09:30  
16                  identification by the court reporter and is  
17                  attached hereto.)  
18                  MS. WEAVER:  And Exhibit 340 is a  
19                  document bearing Bates numbers ADVANCED-META-43  
20                  through -56, and bearing the words "User Data                   11:09:39  
21                  Deletion Policy."  
22                  Q.     (By Ms. Weaver)  Let me know when you  
23                  have them up, Mr. Clark.  
24                  A.     Okay.  
25                  Which one would like me to look at first?                   11:09:58

1 Q. Why don't you look at 339, and let's just 11:10:01  
2 identify it for the record.

3 A. Okay.

4 Q. In the informal way, not the data way.

5 A. This appears to be the notes that I typed 11:10:20  
6 up, which I have physically in front of me as well.

7 Q. And what was the basis for these notes?

8 A. I had a lot of documents that I reviewed  
9 and wanted to be able to keep the timeline straight  
10 in my head for what happened when. 11:10:39

11 Q. And do you have a list of the notes that  
12 you relied upon when you drafted these notes -- I'm  
13 sorry. Strike that and I'll restate it.

14 Do you have a list of the documents that  
15 you relied upon in drafting these notes? 11:10:52

16 A. I -- these were documents provided by  
17 counsel, for instance, the UDDP. The deletion  
18 controls from 2012. The PwC audits. Number of  
19 Wikis.

20 As -- as it says right here, like 11:11:17  
21 these are -- these are examples of -- of what I  
22 pulled this from.

23 Q. And you physically possessed those  
24 documents at the time you were writing these notes;  
25 is that right? 11:11:27

1	A. Yes.	11:11:27
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2 Q. And do you still have them?

3                   A.     Not right in front of me, but I do have  
4     them.

5 Q. Okay. And you could prepare a list of 11:11:31  
6 them, correct?

7	A. Correct.
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8 Q. Okay. And do you believe that these  
9 notes are true and accurate, to the best of your  
10 knowledge, based on the documents that you 11:11:43  
11 reviewed?

12 MR. BLUME: Objection. Form.

13 THE DEPONENT: They were only notes. And  
14 based on what I had, I believe them to be true.

15 Q. (By Ms. Weaver) Okay. Let's go look at 11:11:54

16 Exhibit 340.

17           A.    I am opening it and waiting for it to  
18    load.

19	I am looking through the document. I	
20	don't know if this is an error. This appears to be	11:12:47
21	two different documents.	

22                   There is the UDD\_ -- UDDP, or the user  
23       data deletion policy, which comes from the internal  
24       Facebook policies. And then it appears the last  
25       three pages look like a spreadsheet of control 11:13:11

1 objectives and safeguards associated with deletion. 11:13:13

2 Q. Okay. Have you seen both of these  
3 documents before?

4 A. I -- I have seen both of these documents  
5 before. 11:13:27

6 Q. Okay. This was how it was produced to  
7 us. So we didn't know that they were, in fact,  
8 separate documents. And I think what we will do is  
9 re-mark them and we will end Exhibit 340 at  
10 Bates number 53, and then we will re-mark as 11:13:47  
11 Exhibit 341, the document beginning with  
12 Bates number -54 through -59.

13 (Exhibit 341 was marked for  
14 identification by the court reporter and is  
15 attached hereto.) 11:13:57

16 MS. WEAVER: No objection from opposing  
17 counsel, if we do so?

18 MR. BLUME: No objection.

19 MS. WEAVER: Okay. So Josh -- Mr. Samra,  
20 maybe you could work on that. 11:14:09

21 Q. (By Ms. Weaver) In the meantime, if  
22 there's no objection, we'll just take testimony on  
23 the documents and re-mark them later?

24 MR. BLUME: That's fine.

25 Q. (By Ms. Weaver) Okay. Looking at the 11:14:18

1 first page of Exhibit 340, Mr. Clark, what -- what 11:14:19

2 is this document?

3 A. This appears to be the user -- the

4 internal Facebook user data deletion policy,

5 effective October 23, 2020. 11:14:40

6 Q. And is it in effect today?

7 A. Yes.

8 Q. And have you seen the policy that was in

9 effect prior to October 23, 2020?

10 A. I reviewed the controls and Wiki pages 11:14:55

11 prior to that, and the privacy policies prior to

12 that.

13 Q. Was there a document similar in scope and

14 purpose to user data deletion policy at

15 Exhibit 340, prior to October 23, 2020? 11:15:13

16 MR. BLUME: Objection. Form.

17 THE DEPONENT: The mix of controls and

18 deletion Wiki pages were the -- the prior version

19 of this, between what's found in our external

20 facing policy, in addition to our internal pages, 11:15:36

21 plus the controls, the combination of those.

22 Q. (By Ms. Weaver) Currently, how does the

23 external facing and the internal facing policy

24 differ from one another?

25 MR. BLUME: Objection. Form. 11:15:53



1 THE DEPONENT: The internal policy 11:15:56

2 [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 [REDACTED]

6 [REDACTED]

7 externally would not have all of those details.

8 Q. (By Ms. Weaver) And do you see, at the

9 first page of Exhibit 340, a reference to "User

10 Data" in the header? 11:16:41

11 A. Where -- and apologies.

12 Do you mean where it says "7/7/2021" and

13 then "User Data Deletion Policy"?

14 Q. Yes. That's one of the places.

15 A. Okay. 11:17:02

16 Q. And then a little bit lower, do you see

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 Do you see that? 11:17:13

21 A. I do.

22 Q. What's your understanding of what user

23 data means?

24 A. User data is -- is information that the

25 user has provided, so user-generated content. In 11:17:32

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1 addition to information that is about and 11:17:36  
2 associated with the user.

3 Q. And when you say "In addition to  
4 information that is about and associated with the  
5 user," can you be more specific, providing examples 11:17:53  
6 of what you mean?

7 A. I -- I will give an example.

8 I -- I believe an example of it might be  
9 a photo that I posted to my profile. The  
10 user-generated content is the photo that I've 11:18:07  
11 provided and any word that I've provided describing  
12 it.

13 In addition to user data, associated  
14 would -- would also include the likes or reactions  
15 to that photo. The comments associated with that 11:18:22  
16 photo. And the -- and the associated log entry  
17 that I've uploaded that photo would be -- those  
18 would be a series of example.

19 Q. Does it include metadata?

20 MR. BLUME: Objection. Form. 11:18:46

21 THE DEPONENT: The -- the log entry would  
22 be an example of metadata.

23 Q. (By Ms. Weaver) Is an example of  
24 metadata also, for example, location information?

25 A. Yeah. If I tagged the photo as -- if I 11:18:59

1 provided a location in that photo, yes. 11:19:03

2 Q. Are privacy settings metadata that is  
3 also associated with user data?

4 MR. BLUME: Hold on.

5 Objection. Form. 11:19:26

6 THE DEPONENT: I -- could you be more  
7 specific. That's -- that's a very broad...

8 Q. (By Ms. Weaver) Yes, I can.

9 If a user posts a photo, using your  
10 example, but posts it not publicly, is there a 11:19:34  
11 metadata field associated with the photo?

12 A. There is -- I -- I -- I don't know if I'd  
13 call that metadata, but there is -- there is an  
14 association -- would be the technical term the --  
15 to what that audience control setting was for that 11:19:52  
16 photo.

17 Q. And does that association have a name?

18 Is it called a privacy setting or a...

19 MR. BLUME: Objection.

20 THE DEPONENT: I -- I'd refer to it as 11:20:09  
21 audience control, specifically, as -- as what that  
22 setting would be.

23 Association is -- or ASSOC, A-S-S-O-C,  
24 which is short for association -- is the  
25 association itself of -- of the log entry or the 11:20:26

1 audience control back to that photo. 11:20:32

2 Q. (By Ms. Weaver) And if a user posts a  
3 photo publicly, is there an ASSOC file that people  
4 externally can see?

5 MR. BLUME: Objection. Form. 11:20:48

6 THE DEPONENT: Can you tell me what you  
7 mean by "see"?

8 Q. (By Ms. Weaver) Is there a way for  
9 anyone to be able to determine, by looking at a  
10 file and its associated data, that a photo was 11:21:05  
11 publicly posted on someone's wall?

12 A. While I didn't prepare for that  
13 specifically as part of this testimony and --  
14 and -- and role as a company representative, but  
15 speaking from personal experience, that is 11:21:28  
16 represented on -- on every photo and post. There  
17 is a -- there is both an icon and a link for how --  
18 whether it is public or whether it's friends only,  
19 or what that audience control might be.

20 Q. And Facebook maintains that information 11:21:44  
21 in association with the object; is that right?

22 MR. BLUME: Objection. Form. Scope.

23 THE DEPONENT: In order -- as -- as part  
24 of the apps's functionality, yes, that would --  
25 there would need to be an association. 11:22:07

1 Q. (By Ms. Weaver) Okay. And I will come 11:22:11  
2 back to that.  
3 Returning to Exhibit 340, could you  
4 please turn to the page ending with  
5 Bates number -50. 11:22:27  
6 And do you know what I mean by  
7 Bates number?  
8 A. The number in the lower right-hand  
9 corner?  
10 Q. Yes. Perfect. 11:22:35  
11 A. Okay. And just for clarity, 340 is the  
12 UD -- is the user data deletion policy?  
13 Q. Yes.  
14 And you referred to it as the UDDP; is  
15 that correct? 11:22:43  
16 A. That is correct.  
17 Q. So I'm -- I'll direct your attention to  
18 [REDACTED]  
19 And do you see the first sentence where  
20 [REDACTED] [REDACTED]  
[REDACTED] [REDACTED]  
[REDACTED] [REDACTED]  
23 A. Yes.  
24 Q. And that's Facebook's policy, right?  
25 A. That is Facebook's policy. 11:23:12

1 Q. And how long has that been Facebook's 11:23:13  
2 policy?

3 A. That has been Facebook's policy for as

4 [REDACTED]  
5 [REDACTED] [REDACTED] [REDACTED]  
6 [REDACTED]  
7 [REDACTED]  
8 [REDACTED]  
9 [REDACTED]

10 Q. Why is that Facebook's policy? 11:23:44

11 MR. BLUME: Objection. Form. Scope.

12 [REDACTED] [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 [REDACTED] [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED] [REDACTED]

21 [REDACTED]

22 Q. (By Ms. Weaver) And how long has that  
23 been Facebook's policy?

24 A. I'm temporally referring back to my

25 notes, so I can remember the timing. 11:24:38

1           The process that I was referring to, and           11:24:41  
2       the process that's referred to -- part of the  
3       process referred to that's in here is a process  
4       [REDACTED]  
5       [REDACTED]  
6       [REDACTED]  
7       [REDACTED]  
8       Q.    So to your understanding, the data  
9       deletion policy described in Exhibit 340 was in  
10      effect from 2011 forward; is that right?           11:25:21  
11      A.    That --  
12           MR. BLUME:  Objection.  Form.  
13           THE DEPONENT:  The technical components  
14      [REDACTED]  
15      and it's my understanding that that was part of the           11:25:30  
16      policy with that implementation as well.  
17           (Exhibit 342 was marked for  
18      identification by the court reporter and is  
19      attached hereto.)  
20           MS. WEAVER:  Okay.  I'll go ahead and           11:25:36  
21      mark now tab 302, Josh -- actually, I think what we  
22      will do next -- yeah, let's -- let's -- strike  
23      that, Josh.  
24           Let's mark tab 81.  
25           And for the record, tab -- tab 81 bears           11:26:17

1 Bates number ADVANCE-META-1 to -2. 11:26:19

2 It bears the words at the top left-hand

3 page, "Data/Deleting Deleted Data - Facebook." And

4 it says "Last modified Wednesday, November 30, 2011

5 at 8:17pm by Adam Kramer." 11:26:36

6 Q. (By Ms. Weaver) And let me know when you

7 see Exhibit 342, Mr. Clark. I have it up.

8 A. I will refresh.

9 I have it now. Waiting for it to open.

10 I have it open. 11:27:39

11 Q. And when you have a moment to review it,

12 please just tell me, what is Exhibit 342.

13 Have you seen Exhibit 342 before,

14 Mr. Clark?

15 A. I have. 11:29:51

16 Q. And when did you last see it?

17 A. Read it over the weekend.

18 Q. Okay. And you're rereading it now?

19 A. Yup.

20 Okay. I've completed reading. 11:30:31

21 Q. What is Exhibit 342?

22 A. It is an internal Wiki page labeled

23 "Deleting Deleted Data," dated November 30th, 2011.

24 Q. And does it express what Facebook's

25 policy and practices were, as of its date, with 11:30:54



1 | regard to deleting deleted data? 11:30:57

2 MR. BLUME: Objection. Form.

3 THE DEPONENT: I can state what it  
4 appears to be. It's not identified as a policy  
5 specifically. 11:31:08

6                   It looks like an engineer with very  
7   colorful writing wrote details about implementation  
8   of deleting deleted data and how to -- how to  
9   handle it. I -- it doesn't identify itself as a  
10 policy. 11:31:36

11 Q. (By Ms. Weaver) I'm asking you, as  
12 Facebook, if this was Facebook's policies and  
13 procedures as of 2011?

14 MR. BLUME: Objection. Form.

15	THE DEPONENT: It appears to be internal	11:31:53
16	Facebook developer documentation on working with	
17	deleting deleted data.	

18 Q. (By Ms. Weaver) And is there something  
19 about it you think is inaccurate?

20	MR. BLUME: Objection. Form.	11:32:06
----	-----------------------------	----------

21 THE DEPONENT: The only thing that I'm  
22 stating is that it doesn't appear to identify  
23 itself as a formal policy.

24 Q. (By Ms. Weaver) Okay. Does it -- well,  
25 looking at the -- the document itself, do you see 11:32:17

1

[REDACTED]

[REDACTED]

2

[REDACTED]

3

[REDACTED]

4

[REDACTED]

5

Do you see that?

11:32:31

6

A. I do see that.

7

[REDACTED]

8

[REDACTED]

9

[REDACTED]

10

[REDACTED]

11:32:45

11

Do you see that?

12

A. I do see that sentence.

13

[REDACTED]

14

A. I do not know.

15

Q. You're not familiar with a project called

11:32:58

16

[REDACTED]

17

A. I'm not familiar with a project called

18

[REDACTED]

19

Q. We'll return to that.

20

[REDACTED]

[REDACTED]

21

[REDACTED]

22

[REDACTED]

23

[REDACTED]

24

[REDACTED]

25

Do you see that?

11:33:25

1 A. I do see that sentence. 11:33:26

2 Q. Is that accurate?

3 MR. BLUME: Objection. Form.

4 THE DEPONENT: I agree with the first  
5 sentence. The expression in the second sentence 11:33:42  
6 is -- is the opinion of an engineer as opposed to  
7 formal policy as the rationale for theirs, but...

8 Q. (By Ms. Weaver) Okay. Does Facebook let  
9 a user choose who can see a post on Facebook,  
10 whether it's a comment or a post or a photo? 11:34:05

11 A. Yes.

12 MR. BLUME: Objection. Form. Scope.

13 Q. (By Ms. Weaver) Looking at the next

14 [REDACTED]

[REDACTED] [REDACTED]

[REDACTED]

17 Do you see that?

18 A. I do see that.

19 Q. Do you agree with that?

20 MR. BLUME: Objection. Form. Scope. 11:34:31

21 THE DEPONENT: I -- in -- I would refer  
22 back to the UDDB [sic] where -- and -- and the  
23 phrasing of that statement as formal policy, yes.

24 Q. (By Ms. Weaver) And the next sentence

25 [REDACTED] 11:34:48

1

3

Do you see that sentence?

4

A. I do see that sentence.

5

Q. Okay. What does UDB mean?

11:35:05

6

A. I believe that is the user database.

7

Q. And how is that different from Hive?

8

MR. BLUME: Objection. Form. Scope.

9

THE DEPONENT: The UDB, which in the

10

modern version of how we named that would be called

11:35:28

11

TAO -- the objects and associations -- is the

12

online production storage systems that the

13

applications actually run from as opposed to Hive,

14

which is the data warehouse.

15

Q. (By Ms. Weaver) And what does "business

11:35:49

16

need" mean in this document?

17

MR. BLUME: Objection. Form. Scope.

18

THE DEPONENT: I don't know exactly what

19

business need was defined as in this document.

20

Q. (By Ms. Weaver) What's your

11:36:11

21

understanding, on behalf of Facebook, as to what

22

23

24

MR. BLUME: Objection. Form.

25

THE DEPONENT: The -- I -- I believe

11:36:26



1 Q. (By Ms. Weaver) And in the -- do you see 11:37:35

2 [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 [REDACTED] [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 Do you see that?

9 A. I do read that.

10 Q. Is it Facebook's policy that it only has 11:37:59

11 the obligation to delete user-generated content,

12 but not metadata or the context around UGC?

13 MR. BLUME: Objection. Form. Scope.

14 THE DEPONENT: Specifically, I would

15 refer to -- to -- to the question that you're 11:38:22

16 asking -- to the user data deletion policy back in

17 Exhibit 340, to what the policy is.

18 Q. (By Ms. Weaver) I -- I don't want you to

19 refer to a document. I'm trying to get your

20 testimony here. 11:38:40

21 So the question is, is it Facebook's

22 policy that Facebook only has the obligation to

23 delete user-generated content, but not metadata or

24 the content around UGC?

25 MR. BLUME: Objection. Form. Scope. 11:38:54

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1           A.     That is -- that is the date of the last                   11:40:26  
2     update to that document.

3           Q.     And looking back at Exhibit 342, is this  
4     document correctly describing the policy that was  
5     in effect at the time?   11:40:39

6           A.     This document doesn't identify itself as  
7     a policy at the time. It is an engineer's notes  
8     on de- -- an internal Facebook engineer's notes on  
9     deleting deleted data.

10           MS. WEAVER: Okay. Let's take a look --                   11:40:58  
11     and we can refresh. I've marked another couple of  
12     documents, and I'd like you to take a look at  
13     Exhibit 344.

14                     (Exhibit 344 was marked for  
15     identification by the court reporter and is                       11:41:22  
16     attached hereto.)

17           THE DEPONENT: That was 344?

18           MS. WEAVER: Yes.

19           THE DEPONENT: Thank you.

20           MS. WEAVER: No, I skipped one. I'll go                   11:41:32  
21     back to it.

22           THE DEPONENT: For clarity, which  
23     document am I supposed to look at?

24           MS. WEAVER: Exhibit 344.

25           THE DEPONENT: Oh.   11:42:10



1 MS. WEAVER: And for the record, 11:42:29  
2 Exhibit 344 is one of the documents that plaintiffs  
3 identified to Facebook in preparation for this  
4 deposition over, I think, two weeks ago now. And  
5 it bears Bates numbers PwC\_CPUP\_FB00007766 through 11:42:40  
6 -68.

7 On the first page of Exhibit 344, it says  
8 sent Monday February 11th, 2013, from Evan Eneman,  
9 and there's a Facebook email address, to  
10 Kelley K. Perng, P-E-R-N-G at us.pwc.com. 11:43:01

11 Q. (By Ms. Weaver) Let me know when you've  
12 had an opportunity to review it, Mr. Clark.

13 A. I've had a chance to review it.

14 Q. What is Exhibit 344?

15 A. Exhibit 344 is an email with only 11:43:54  
16 attachments from Evan Eneman at Facebook.com to  
17 Kelley K. Perng at PwC.

18 And two of the attachments from the  
19 email, which include the Wiki page that we were  
20 looking at in the prior exhibit called "Deleting 11:44:14  
21 Deleted Data," in addition to an additional Wiki  
22 page called "Deletion Framework."

23 (Exhibit 343 was marked for  
24 identification by the court reporter and is  
25 attached hereto.) 11:44:26

1 Q. (By Ms. Weaver) And not to make this 11:44:27  
2 complicated, but if you look at Exhibit 343, do  
3 you -- can you confirm that this is the other Wiki  
4 that is in this attachment in 344?

5 A. So in 343, which is the "Deletion 11:45:00  
6 Framework," last updated June 3rd, 2013, at  
7 8:02 p.m., the -- in the email, it is the "Deletion  
8 Framework" last modified Thursday, July 12th, 2012,  
9 at 1:49 by a different individual. So it -- it  
10 appears to be the same Wiki page but different 11:45:32  
11 versions of it.

12 Q. And do you have an understanding -- well,  
13 wait -- strike that.

14 When did you last see Exhibit 344?

15 A. In documents I had reviewed over the 11:45:46  
16 weekend.

17 Q. Why do you have an -- why do you  
18 understand that these documents were sent to  
19 someone at PwC, in or around February of 2013?

20 A. I -- I don't have an understanding 11:46:06  
21 because there's context missing in the text of the  
22 email or even the subject line is just 5.2.2B.

23 Q. And around this time, PwC was auditing

24 [REDACTED]  
[REDACTED] 11:46:25

1 MR. BLUME: Objection. Form. 11:46:29

2 THE DEPONENT: That is my understanding,  
3 correct.

4 Q. (By Ms. Weaver) And you can confirm that  
5 Facebook provided this to PwC as part of that 11:46:38  
6 audit, right?

7 MR. BLUME: Objection. Form. Scope.

8 THE DEPONENT: I -- I'll reiterate,  
9 without further context on the email, I don't know  
10 exactly what the email was to know if that was a 11:46:52  
11 specific request of the audit or -- or what the  
12 purpose was.

13 Q. (By Ms. Weaver) Okay. We'll let the  
14 jury decide that.

15 Looking back at Exhibit 342, the document 11:47:05  
16 that we were discussing, the very specific question  
17 to you, as Facebook's representative is, was it  
18 ever Facebook's policy that it would retain  
19 metadata or context around the post but would  
20 delete user-generated content? 11:47:25

21 MR. BLUME: Objection. Form.

22 THE DEPONENT: Can you ask that question  
23 again.

24 Q. (By Ms. Weaver) Yup.

25 A. I got confused by that. 11:47:35



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[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

11:50:07

Q. (By Ms. Weaver) Perfect. Thank you.

I was not trying to trick you. I just  
was trying to understand the policy. And you've  
clarified it and I appreciate it.

Okay. Let's talk about anonymization.

11:50:18

On Exhibit 342, do you see where it says

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

11:50:46

1 Do you see that? 11:50:47

2 A. I see the sentences that you've read,  
3 yes.

4 Q. With regard specifically to the sentence,

5 [REDACTED] [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 MR. BLUME: Objection. Form. Scope.

10 THE DEPONENT: Can you state that one 11:51:13

11 more time.

12 Q. (By Ms. Weaver) Specifically with regard

13 [REDACTED]

14 [REDACTED]

15 [REDACTED] [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 MR. BLUME: Objection. Form. Scope.

19 THE DEPONENT: I -- I asked for clarity

20 because that feels like two separate and distinct 11:51:35

21 questions.

22 Q. (By Ms. Weaver) Okay. I can break it

23 out.

24 [REDACTED]

[REDACTED] 11:51:47

1 [REDACTED] 11:51:51

2 MR. BLUME: Objection. Form. Scope.

3 [REDACTED] [REDACTED]

4 [REDACTED]

5 [REDACTED] [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 Is that the question being asked?

9 Q. (By Ms. Weaver) Yes.

10 MR. BLUME: Same objection. 11:52:11

11 THE DEPONENT: That is correct.

12 Q. (By Ms. Weaver) And does Facebook have a

13 [REDACTED]

14 [REDACTED]

15 MR. BLUME: Objection. Form. And scope. 11:52:23

16 [REDACTED] [REDACTED]

17 [REDACTED]

18 [REDACTED] [REDACTED]

19 [REDACTED] [REDACTED]

20 [REDACTED] 11:52:39

21 Q. (By Ms. Weaver) Okay. And then looking

22 at the next paragraph, does that describe the

23 [REDACTED]

24 [REDACTED]

25 [REDACTED] 11:52:56

1 MR. BLUME: Objection. Form. Scope. 11:53:00

2 [REDACTED] [REDACTED]

3 [REDACTED]

4 [REDACTED] [REDACTED]

5 yes, that is the process of pseudonymization. 11:53:20

6 Q. (By Ms. Weaver) And what triggers the  
7 pseudonymization process at Facebook?

8 MR. BLUME: Objection. Form.

9 THE DEPONENT: Pseudonymization is

10 [REDACTED] [REDACTED]

11 [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 [REDACTED] [REDACTED]

16 [REDACTED]

17 Q. (By Ms. Weaver) Okay. I'll come back to  
18 the second question in just a second, by what you  
19 mean by identifiable data.

20 Are there occasions where the process of 11:54:21

21 [REDACTED]

22 [REDACTED]

23 MR. BLUME: Objection. Form.

24 THE DEPONENT: Specifically -- and -- and

25 I -- I know you asked me not to do it, but the 11:54:45

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1 exceptions to that are -- are laid out in the UDDP, 11:54:50  
2 and if we could refer to -- back to the UDDP in  
3 340 --

4 Q. (By Ms. Weaver) Sure. Let's look at it.

5 A. -- what those exceptions are, are listed 11:54:59  
6 there.

7 Q. Let's turn to Exhibit 340.

8 A. I'm waiting for it to load, and I will go  
9 to the specific section.

10 Q. Fabulous. 11:55:14

11 And I think you're looking for page 45,  
12 under "Exceptions."

13 A. That is correct. Page 45, under  
14 "Exceptions."

15 [REDACTED] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

24 A. Yeah. This is one -- I'll -- I'll

25 actually, for the sake of the record, read from the 11:56:06

1 document, so it's -- it's clear and concise. 11:56:09

2

█

█

█

█

█

█

█

█

11:56:35

11 Q. What's a litigation hold?

12 MR. BLUME: Objection. Form. Scope.

13 THE DEPONENT: I didn't specifically  
14 prepare, as -- as a corporate representative, to  
15 talk about what -- a litigation hold.

11:56:50

16 But from my personal experience,  
17 litigation hold is where there is some kind of  
18 order to hold data from -- from a Court or...

19 Q. (By Ms. Weaver) Are you done talking?

20 Your -- your last sentence --

11:57:09

21 A. Oh, I was.

22 Q. -- ended with "or" -- or the last word  
23 was "or."

24 A. Oh, I meant to say "order." But I was  
25 going to cough and stopped.

11:57:16

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1 Q. No problem. I've been there. 11:57:17

2 Are you aware of any litigation holds  
3 being issued at any point in time, since you've  
4 been working at Facebook, which suspended the  
5 process of anonymization that we have just been

11:57:32

6 [REDACTED]

7 MR. BLUME: Objection. Form. Scope.

8 THE DEPONENT: Can you ask that entire  
9 question one more time.

10 Q. (By Ms. Weaver) Are you aware of any 11:57:48

11 litigation holds being issued at any point in time,  
12 since you have been working at Facebook, which  
13 suspended the process of pseudonymization that

14 [REDACTED]

15 [REDACTED]

11:58:02

16 MR. BLUME: Same objection.

17 THE DEPONENT: The deletion process, in

18 [REDACTED]

19 [REDACTED]

20 [REDACTED]

[REDACTED]

21 [REDACTED]

22 [REDACTED]

23 [REDACTED]

24 Q. (By Ms. Weaver) With regard to the

25 [REDACTED]

11:58:42

1 happen on an ongoing basis for every user? 11:58:47

2 A. The -- to use a metaphor, so like if

3 you've ever taken the tour of the Golden Gate and

4 they like to tell you that they start painting it

5 and never finish painting it, and that is how that 11:58:59

6 process works. That is a process that's

7 continually running in the background to -- to

8 continually anonymize that information.

9 Q. Just to be clear, if I am a current

10 [REDACTED] [REDACTED]

11 [REDACTED]

12 right?

13 A. That is --

14 MR. BLUME: Object -- objection. Form.

15 THE DEPONENT: That is incorrect as 11:59:28

16 stated. Your statement included all of my data.

17 That could not be the case or the product couldn't

18 function.

19 I've got photos that I've uploaded of my

20 kids 15 years ago that -- in order for the product 11:59:41

21 to function and work, those photos can't be

22 anonymized or the data associated with them.

23 Very specifically, the pseudonymization

24 [REDACTED]

25 [REDACTED] 11:59:58

1

2

3

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10

11

12

13

14

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16

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19

20

21

22

23

24

25

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

MR. BLUME: Ms. Weaver, if you get to a

good breaking point...

Thank you.

12:00:27

Q. (By Ms. Weaver) And it's your testimony

[REDACTED]

[REDACTED]

A. It is my testimony that --

MR. BLUME: Sorry. Objection. Form.

12:00:36

And scope.

Go ahead.

THE DEPONENT: It is my testimony that

[REDACTED]

[REDACTED]

12:00:46

Q. (By Ms. Weaver) And are you aware of

[REDACTED]

[REDACTED]

process was halted with regard to the named

plaintiffs in this action?

12:01:01

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1 MR. BLUME: Objection. Beyond the scope. 12:01:03  
2 Form.  
3 THE DEPONENT: I'm not aware.  
4 Q. (By Ms. Weaver) Do you know who would  
5 know? 12:01:10  
6 A. I do not.  
7 Q. Do you have any reason to think it was?  
8 MR. BLUME: Objection. Form. Scope.  
9 THE DEPONENT: It -- it is my  
10 understanding that the deletion process and the 12:01:21  
11 deletion framework is not halted for any of those  
12 reasons.  
13 MS. WEAVER: Okay. Yeah, we can take a  
14 break now. Thank you.  
15 You might want some water. 12:01:34  
16 We can go off the record.  
17 THE VIDEOGRAPHER: Thanks. We're off the  
18 record. It's 12:01 p.m.  
19 (Recess taken.)  
20 THE VIDEOGRAPHER: Okay. We're back on 12:15:30  
21 the record. It's 12:15 p.m.  
22 Q. (By Ms. Weaver) Mr. Clark, you  
23 understand you're still under oath, right?  
24 A. Yes.  
25 (Brief Interruption.) 12:15:47

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1 THE VIDEOGRAPHER: Sorry about that. 12:15:47

2 A recording is going. I just hit the

3 other backup thing by accident.

4 MS. WEAVER: Okay. Fine. So it is

5 recording right now; is that correct? 12:15:54

6 THE VIDEOGRAPHER: Yeah, we're recording.

7 Thank you.

8 MS. WEAVER: Perfect.

9 Q. (By Ms. Weaver) Mr. Clark, returning to

10 Exhibit 342, under the heading "Anonymization," we 12:16:00

11 [REDACTED]

12 Do you recall that?

13 A. Yes.

14 [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED]

20 Do you see that? 12:16:33

21 A. I do see that sentence.

22 Q. And is that consistent with your

23 understanding?

24 MR. BLUME: Objection. Form. Scope.

25 THE DEPONENT: Until an account is -- 12:16:48

1

2

3

Q. (By Ms. Weaver) And what does it mean to

4

5

MR. BLUME: Objection. Form. Scope.

12:17:04

6

THE DEPONENT: I do not know what this

7

engineer meant by that.

8

Q. (By Ms. Weaver) Okay. And I meant to

9

open this with a question about testimony that you

10

gave a little bit earlier.

12:17:21

11

You referred to it might be that a

12

snapshot was taken of data before this process was

13

engaged in.

14

Do I have that correct?

15

MR. BLUME: Objection. Form. Scope.

12:17:33

16

THE DEPONENT: I -- if it's the statement

17

I remember, that sounds slightly inaccurate.

18

Q. (By Ms. Weaver) Well, let me read it

19

back to you --

20

A. Yeah.

12:17:49

21

Q. -- or I'm trying to.

22

You said "The deletion process in the

23

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12:18:05



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[REDACTED]

Do you see that -- or is that consistent with your understanding?

MR. BLUME: Objection.

12:18:17

THE DEPONENT: That is consistent with my understanding.

Q. (By Ms. Weaver) So can you explain for me what you meant when you referred to a snapshot and what its purpose was?

12:18:25

MR. BLUME: Objection. Form. Scope.

THE DEPONENT: For the sake of preparation and preparing for this, I did evaluate our policies and practices with regards to what happens when a litigation hold, or a similar

12:18:39

[REDACTED]

it.

[REDACTED]

in process or happens after that request has come in.

Q. (By Ms. Weaver) And what is the source of your information regarding the snapshot?

A. I only know the name of it as a snapshot.

12:18:53

12:19:10

1 And it was from -- it was from the -- from the 12:19:14  
2 interviews that I did. And I believe that one  
3 was -- in that conversation was counsel and  
4 Mayur Patel.

5 Q. And Mr. Patel or is it Ms. Patel? 12:19:29

6 A. Mister.

7 Q. Mr. Patel told you that a snapshot might  
8 be taken?

9 [REDACTED]  
10 [REDACTED] 12:19:46

11 Myself, nor himself, or our experts on the legal  
12 hold process, it's merely the -- this is the  
13 process associated with the deletion framework.  
14 Neither of us are experts on the -- the actual  
15 snapshot that's occurring, only the deletion 12:20:02  
16 framework and the processes associated with it.

17 Q. What do you understand the snapshot is  
18 taken of?

19 MR. BLUME: Objection. Form. Scope.

20 THE DEPONENT: I did not prepare for that 12:20:16  
21 as part of this testimony.

22 Q. (By Ms. Weaver) Okay. But do you have  
23 an understanding, as you sit here, what the  
24 snapshot is taken of?

25 A. It -- I do not. It would be entirely 12:20:25

1 speculation, so I wouldn't know. 12:20:28

2 Q. Okay. Returning to Exhibit 342.

3 Do you see where it says -- I'm back to  
4 the paragraph we were reading together -- and it

5 [REDACTED] [REDACTED]

6 [REDACTED] [REDACTED]

7 [REDACTED]

8 Do you see that?

9 A. I do see that sentence.

10 Q. Is that correct? 12:21:10

11 MR. BLUME: Objection. Form. Scope.

12 THE DEPONENT: As of the date of this  
13 document and this engineering documentation,  
14 that -- that is my understanding as to where that  
15 association occurs. 12:21:26

16 Q. (By Ms. Weaver) And does that  
17 association still occur in that table?

18 A. It still occurs in a physical table  
19 with -- but the mapping to it is in TAO.

20 Q. And what is the name of that table? 12:21:46

21 A. I believe it's still the same table as  
22 the underlying physical table. I don't know the --  
23 I don't know the exact name of the association in  
24 TAO.

25 Q. So -- 12:21:57

1 A. Like -- 12:21:58

2 Q. -- for example, if I wanted to search for  
3 data associated with a current Facebook user, could

4 [REDACTED]  
5 [REDACTED] 12:22:10

6 MR. BLUME: Objection. Form. Scope.

7 THE DEPONENT: I -- I believe you've  
8 asked two or three different questions in that one.

9 Do you mind breaking that up?

10 Q. (By Ms. Weaver) Okay. It's actually 12:22:20  
11 meant to be one question.

12 A. Okay.

13 Q. Using this table, can you identify data  
14 that is older than 90 days for a current Facebook  
15 user? 12:22:33

16 MR. BLUME: Objection. Form.

17 THE DEPONENT: The question itself isn't  
18 specific enough for me to be able to answer with a  
19 yes or a no.

20 Q. (By Ms. Weaver) Okay. Why don't you 12:22:44  
21 answer as best you can and we'll try to clean it  
22 up.

23 A. Okay. If you go back to your original  
24 and -- and ask me the first part of your question.

25 Q. Using this table, can you identify data 12:22:58

1 for a current Facebook user that is older than 12:23:04

2 90 days?

3 MR. BLUME: Objection. Objection.

4 Scope. And form.

5 THE DEPONENT: Could you identify data 12:23:16

6 for a current user.

7 Could identify in production data systems

8 metadata for a current user past 90 days because

9 [REDACTED]

10 that metadata might be, to use your earlier 12:23:44

11 example, the audience control settings on a post,

12 because that's part of the production storage

13 system.

14 But you would not use this table to map

15 to that association because it's current, active, 12:24:01

16 live production user data.

17 Q. (By Ms. Weaver) What do you mean when

18 you say "production data systems metadata"?

19 A. I will answer that in a few parts.

20 I think the production -- when I -- when 12:24:35

21 I refer to production, it's the storage systems,

22 the -- the Graph and the associated storage systems

23 for where the functionality of the platform --

24 the -- the Facebook product itself, where content

25 is served from and where the data, in order to 12:24:48

1 populate that product, comes from. 12:24:52

2 Alternatively, the offline storage  
3 systems or the -- or the data warehouse that is not  
4 part of the production storage platform --

5 Q. Okay. 12:25:12

6 A. -- does not serve content directly to the  
7 platform or the application.

8 Q. I understand.

9 Yes, you are answering a different  
10 question than I am asking. And it's my fault, so 12:25:20  
11 let me try again.

12 [REDACTED]

13 MR. BLUME: Objection. Form. Scope.

14 [REDACTED] [REDACTED]

[REDACTED] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] [REDACTED]

[REDACTED]

[REDACTED]

23 Q. (By Ms. Weaver) Can you search Hive

24 [REDACTED]

25 MR. BLUME: Objection. Form. Scope. 12:26:32

1 THE DEPONENT: The answer to that 12:26:38  
2 question is -- is, if I'm looking in an individual  
3 table, can I look for a specific -- and that answer  
4 would be yes.

5 MS. WEAVER: Okay. Let's mark tab 4. 12:26:52  
6 We're going to come back to this exhibit,  
7 but I just like where you're headed so I'm going  
8 to...

9 Q. (By Ms. Weaver) And while we're waiting  
10 for it to load, how can you search an individual 12:27:11  
11 [REDACTED]

12 MR. BLUME: Objection. Form. Beyond the  
13 scope.

14 THE DEPONENT: I did not specifically  
15 prepare for that as part of my representing 12:27:31  
16 Facebook.

17 Q. (By Ms. Weaver) Please answer the  
18 question.

19 MR. BLUME: Same objection.

20 THE DEPONENT: In my personal capacity, 12:27:43  
21 if I were querying Hive, I -- I would use one of  
22 the -- one of the tools built to query offline  
23 tables in Hive and would -- would use a query  
24 language called HQL.

25 Q. (By Ms. Weaver) HQL? 12:28:03





1 in -- in order how to go look for it. 12:29:20

2 Q. (By Ms. Weaver) And let -- let me ask  
3 this, how does the HQL tool work?

4 MR. BLUME: Objection. Form. Beyond the  
5 scope. 12:29:36

6 THE DEPONENT: Well, I can't answer that  
7 question in the context of preparation that I did  
8 as a representative of Facebook.

9 But in my personal capacity, HQL isn't  
10 software. H -- HQL is part the -- the query 12:29:47  
11 language that's part of Hive as a -- as a storage  
12 system.

13 Q. (By Ms. Weaver) I understand. And  
14 that's not what I asked you.

15 You said if you were going to search 12:29:58  
16 Hive, you would use the HQL tool.

17 How does the HQL tool work?

18 MR. BLUME: Objection. Form. Beyond the  
19 scope.

20 THE DEPONENT: That wasn't something that 12:30:12  
21 I specifically prepared for as a representative of  
22 Facebook.

23 But in my personal capacity, and to  
24 clarify my prior answer and make sure that it's  
25 accurate and concise there, I would either use a 12:30:23

1 series of tools, and then I would use the HQL 12:30:26

2 language in -- in one of those tools.

3 Q. (By Ms. Weaver) Thank you.

4 So you would use HQL language and a

5 series of tools. 12:30:40

6 What are those tools?

7 MR. BLUME: Objection. Form. Beyond the

8 scope.

9 THE DEPONENT: I didn't specifically

10 prepare for that in the -- as a representative of 12:30:48

11 Facebook.

12 But in my personal capacity, an example

13 of one of those tools might be a tool called Scuba.

14 Q. (By Ms. Weaver) And what is Scuba?

15 MR. BLUME: Same objection. 12:31:09

16 THE DEPONENT: I didn't specifically

17 prepare for that as part of my testimony as a

18 representative of Facebook.

19 But in my personal capacity, Scuba is a

20 tool to help data scientists and data engineers, 12:31:18

21 where they know where data lives in Hive, to be

22 able to write a query to do analysis or -- or

23 analytics on a subset of data.

24 Q. (By Ms. Weaver) And you said to help a

25 data scientist and data engineers where they know 12:31:46

1 where data lives in Hive. 12:31:49

2 Do you recall that?

3 A. Yes.

4 Q. And how do data scientists and data

5 engineers knows where data lives in Hive? 12:32:00

6 MR. BLUME: Objection. Form. Scope.

7 THE DEPONENT: I did not prepare for that

8 as part of the scope of my testimony as a

9 representative of Facebook.

10 But in my personal capacity, what I meant 12:32:14

11 by that was that I would need to know the table

12 where that data lives in order to be able to go

13 write a query.

14 There are -- there are lots of tables.

15 And as a data scientist or a data engineer, I 12:32:30

16 would -- I would need to know where those tables

17 are in order to be able to go query to do that.

18 (Exhibit 345 was marked for

19 identification by the court reporter and is

20 attached hereto.) 12:32:43

21 MS. WEAVER: Okay. Let's take a look at

22 Exhibit 345, which is loaded.

23 And for the record, Exhibit 345 bears

24 Bates numbers FB-CA-MDL-00347605 through -886.

25 Q. (By Ms. Weaver) And while -- while 12:33:05

1       you're waiting for it, to pull it up, Mr. Clark --                   12:33:05  
2       just let me know when you have it -- it says "This  
3       document contains all of the recently used Hive  
4       tables as defined by any table which has at least  
5       one user in the past 30 days as of 5/12/2010. It                   12:33:16  
6       is sorted by the number of distinct users within  
7       this period."

8               Do you see that?

9       A.    It's still loading.

10       Q.    Okay.   12:33:32

11       A.    Is -- is that at the beginning of the  
12       document?

13       Q.    It's at the top of the document and it's  
14       very long. It's about 280 pages, so...

15       A.    Okay. The document, I think, is fully                   12:33:56  
16       loaded.

17               What was your question?

18       Q.    First of all, do you recognize  
19       Exhibit 3- -- 345, or do you know what it is?

20       A.    I recognize the first page of it. I                   12:34:12  
21       don't -- I saw the first page of it. I don't think  
22       I saw the whole thing. But I'm looking through it.

23               MS. WEAVER: And Josh, could we mark  
24       tab 91.

25       /////

1                   (Exhibit 346 was marked for                   12:35:22  
2                   identification by the court reporter and is  
3                   attached hereto.)

4                   THE DEPONENT: I've looked through --  
5                   I've looked through about 60 pages of it. I -- I                   12:35:26  
6                   can look through the whole document, if you'd like.

7                   Q.     (By Ms. Weaver) No, no, that's fine. I  
8                   think -- if you need to, to answer the question,  
9                   you should.

10                  But, in general, do you have an                   12:35:36  
11                  understanding as to what Exhibit 345 is?

12                  MR. BLUME: And -- and we object to the  
13                  extent it wasn't on the list provided by you before  
14                  the deposition.

15                  THE DEPONENT: I -- I -- I would --                   12:35:49  
16                  any -- I don't know what it is. I don't know the  
17                  source of -- of it. If --

18                  Q.     (By Ms. Weaver) You discussed  
19                  previously -- well, strike that.

20                  Is there any reason to think that this is                   12:36:00  
21                  not a document that contained recently used Hive  
22                  tables, with at least one user in the past 30 days,  
23                  as of May 12th, 2010; i.e., an output for a search  
24                  within Hive at Facebook?

25                  MR. BLUME: Objection. Form. Beyond the                   12:36:15

1 scope. 12:36:16

2 THE DEPONENT: I -- I don't know that I  
3 can make a representation either way. It contains  
4 information that I would expect potentially  
5 describing tables, but I -- without the query or  
6 without further details, I wouldn't be able to  
7 represent one way or the other what this is.

12:36:28

8 Q. (By Ms. Weaver) Okay. I'm going to ask  
9 a few questions, in general. But maybe will spark  
10 some recollection.

12:36:46

11 On the first page of this, you see it

12 [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

12:36:58

16 MR. BLUME: Objection.

17 THE DEPONENT: I do see it at the bottom  
18 of the first page.

19 Q. (By Ms. Weaver) And -- and then it says

20 [REDACTED]  
[REDACTED]

22 Do you see that?

23 A. I do see that.

24 Q. Do you know what partition means with  
25 regard to Hive and Hive tables?

12:37:23

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1 MR. BLUME: Objection. Form. Beyond the 12:37:25  
2 scope.

3 This is a document not produced in  
4 advance of this deposition.

5 THE DEPONENT: I didn't specifically 12:37:33  
6 prepare for that as part of my representation of  
7 Facebook.

8 However, in my personal experience, a  
9 partition is -- Hive is built by a series of --  
10 files and tables are those files and partitions, as 12:37:47  
11 is my general understanding.

12 Q. (By Ms. Weaver) Okay. And then it says  
13 "Columns."

14 Do you see that?

15 MR. BLUME: Same objection. Form. And 12:38:04  
16 scope.

17 And the document not produced pursuant to  
18 the protocol.

19 THE DEPONENT: I do see the word  
20 "Columns." 12:38:13

21 Q. (By Ms. Weaver) And then it says  
22 "userid" after that.

23 Do you see that?

24 A. I do see that.

25 Q. And is -- do you understand that to mean 12:38:22

1 the Facebook ID? 12:38:24

2 MR. BLUME: Objection. Form. Scope.

3 Same objections with regard to the

4 protocol.

5 THE DEPONENT: Yeah, I did not 12:38:30

6 specifically prepare to answer that as -- as a

7 representative of Facebook.

8 In my personal experience, if I saw a

9 column named "userid," I would expect that to be

10 the user ID. 12:38:42

11 Q. (By Ms. Weaver) And was there a point in

12 time when Hive was searchable by user ID?

13 MR. BLUME: Objection. Form. Scope.

14 THE DEPONENT: I didn't specifically

15 prepare for that as part of my being a 12:39:03

16 representative of Facebook.

17 In my personal experience, your question

18 is extremely broad in being able to query Hive. If

19 [REDACTED]

20 [REDACTED] 12:39:22

21 understood the structure, or the columns that are

22 part of that, I could query for user ID in that

23 specific table.

24 Q. (By Ms. Weaver) Okay. And I'll have you

25 look right now at Exhibit 346. 12:39:39



1	A. Waiting for it to refresh.	12:39:54
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2 Q. And while we're waiting, just looking  
3 back at Exhibit 345, to be clear, where this  
4 document -- where columns are identified in Hive,  
5 are columns generally fields that could be searched 12:40:05  
6 using the data in that column?

7 MR. BLUME: Objection. Form. Scope.

8                   And violates pro- -- the use of the  
9       document violates the protocol.

10 THE DEPONENT: I didn't specifically 12:40:23  
11 prepare for that as part of my representation -- or  
12 being a representative of Facebook.

13               However, in my personal capacity, if I  
14 know the table, I can query. But I have to -- in  
15 order from a -- from a feasible -- from a                     12:40:38  
16 technically feasible perspective, I need to  
17 understand the mapping of the table I'm working  
18 with in order to do any queries like that.

19 Q. (By Ms. Weaver) Okay. Why don't you  
20 take a look at Exhibit 346. 12:40:49

21 A. Okay. I --

22 Q. Do you have it up?

23 MS. WEAVER: And for the record, it's  
24 ADVANCE-META-26 to -27.

25 THE DEPONENT: I have it loaded now. 12:41:02

1 Q. (By Ms. Weaver) And what is Exhibit 346? 12:41:04  
2 A. 346 appears -- pardon me -- appears to be  
3 [REDACTED]  
4 [REDACTED]  
5 Q. And that is the process within Hive of 12:41:30  
6 [REDACTED]  
7 correct?  
8 MR. BLUME: Objection. Form.  
9 THE DEPONENT: Specifically, the process  
10 [REDACTED] [REDACTED]  
11 [REDACTED]  
12 Q. (By Ms. Weaver) Right. And we were just  
13 looking at Hive tables with UUIDs in them.  
14 So my question to you was, was it in --  
15 was the practice in effect, prior to a certain 12:42:05  
16 point in time, to maintain UUIDs in Hive?  
17 MR. BLUME: Objection. Form. Scope.  
18 And refers to a document produced in  
19 violation of protocol -- or not produced, I guess,  
20 in violation of protocol. 12:42:23  
21 THE DEPONENT: Can you ask that question  
22 one more time.  
23 Q. (By Ms. Weaver) Yup.  
24 We were just looking at Hive tables with  
25 UUIDs in them, correct? 12:42:34

1 MR. BLUME: Objection. Same -- same 12:42:36  
2 objection.

3 THE DEPONENT: I didn't prepare for that  
4 as -- answering these questions as a representative  
5 of Facebook. 12:42:43

6 But in my personal experience, we were  
7 not looking at actual data of Hive tables. We were  
8 only looking at descriptions in a document that may  
9 or may not actually have been Hive tables.

10 Q. (By Ms. Weaver) Okay. Let me ask this. 12:42:58  
11 Currently, is it possible to obtain a description  
12 in Hive tables that identifies columns that would

13 [REDACTED]  
14 [REDACTED]

15 MR. BLUME: Objection. Form. And scope. 12:43:13

16 THE DEPONENT: Well, I didn't prepare for  
17 that specifically as part of this testimony, as a  
18 representative of Facebook.

19 But in my personal experience, the way  
20 that question is asked, that answer would be "no." 12:43:25

21 Q. (By Ms. Weaver) And why is the answer  
22 "no"?

23 A. While I didn't prepare for this as part  
24 of my testimony as a representative of Facebook, in  
25 my personal capacity, the -- having the column 12:43:40

```
1 | there information -- or the column information | 12:43:45
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4 |           What that tells me is, is there a field

```
5 |         that might be called user ID, which I would expect      12:43:55
```

6



12:44:19

11 MR. BLUME: Objection. Form. Scope.

12 THE DEPONENT: I did not prepare for this

13 as part of my testimony as a representative of

14	Facebook.
----	-----------

15	But based on my personal recollection, if	12:44:28
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16 I know the table and in working with a specific

17



19 Q. (By Ms. Weaver) And looking at

20 Exhibit 346, do you see it also refers to a device 12:44:43

21	ID?
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22           A.    Let me read this document.

23	Q. No problem.
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24 It's under "Overview," and I'm looking at

25 12:44:56

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[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Oh, I'm so sorry. I'm actually looking

12:45:31

at the wrong -- this is my -- my fault. Strike

that. I'm looking at the wrong document.

Let's look at Exhibit 346. That's

totally fine. We can --

Do you see where it says -- strike that

12:45:47

line of questioning and I'll return to it.

[REDACTED]

A. I do see that section.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Do you see that?

A. I do see that sentence.

Q. And what does -- what does that mean?

12:46:23

A. The -- part of -- part of the challenge

of building at this scale and volume of Facebook

and the transactions -- number of transactions that

happen, one of the things that engineer -- internal

Facebook engineers have to do consistently is be

12:46:51

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1 careful to make sure that if processes fail, 12:46:54  
2 because there's many moving parts, that -- that  
3 those processes are always like double-checked and  
4 that there's something that does that.

5 And -- and what I would read into this 12:47:03  
6 sentence in this Wiki page is that at -- at the --

7 [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] [REDACTED] [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

15 Q. Got it. 12:47:41

16 And looking a little lower at  
17 Exhibit 346, do you see where -- the sentence

18 [REDACTED]  
[REDACTED]  
[REDACTED] 12:47:58

21 Do you see that?

22 A. I do see that.

23 Q. Is that true?

24 MR. BLUME: Objection. Form.

25 THE DEPONENT: To the best of my 12:48:08

1 knowledge, that is true. 12:48:08

2 Q. (By Ms. Weaver) And --

3 A. And that is the -- that is the -- that is

4 [REDACTED]

5 from the prior document. 12:48:18

6 Q. Right.

7 So for the record, in Exhibit 342, it

8 [REDACTED]

9 [REDACTED]

10 [REDACTED] 12:48:36

11 A. That is correct.

12 Q. And where does that dim table live?

13 MR. BLUME: Objection. Form.

14 THE DEPONENT: Generally, it lives in the

15 production file system. And to the best of my 12:48:50

16 knowledge, it's available and queriable via TAO.

17 Q. (By Ms. Weaver) And what does dim stand  
18 for?

19 A. I don't remember. It's -- it's a

20 generic -- it's a generic -- it's used 12:49:08

21 industry-wide as -- as a table identifier. I just  
22 don't remember.

23 Q. I'm -- I'm asking also because in -- in  
24 the Exhibit 345, the opening tables were labeled

25 [REDACTED] 12:49:27

1 Do you -- do you recall that? 12:49:31

2 A. I do see that.

3 Q. But you don't know what it means; is that  
4 fair?

5 A. Just to share, I didn't -- I didn't 12:49:43  
6 prepare for that specifically as part of my  
7 testimony as a representative of Facebook.

8 But in my personal recollection, is a --  
9 is -- is used generically industry-wide. And I've  
10 used that outside of Facebook in table names. I 12:49:56  
11 just don't remember what it stands for.

12 Q. Okay. And looking to the next page of

13 [REDACTED]

14 And it --

15 A. Which page are you on? 12:50:18

16 Q. I'm sorry. It's the second page of  
17 Exhibit 346.

18 [REDACTED]

19 [REDACTED]

20 A. I -- I do see that. 12:50:30

21 Q. And -- and it says you can either access  
22 the table we've been discussing or -- and it refers  
23 to another table.

24 Do you see that?

25 MR. BLUME: Objection. Form. 12:50:46

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1 THE DEPONENT: I do see that. 12:50:47

2 Q. (By Ms. Weaver) What is the table

3 identified after the "or"?

4 MR. BLUME: What was that? Can you ask

5 that again. I'm sorry. I missed that. 12:51:01

6 Q. (By Ms. Weaver) What is the table

7 identified after the "or"?

8 (Simultaneously speaking.)

9 MR. BLUME: Oh, after -- after the "or."

10 After the "or," yeah. 12:51:07

11 Objection. Form. Scope.

12 THE DEPONENT: It -- it's not a table, as

13 I'm reading this. If you read the follow-on

14 sentence, maybe -- it -- it refers to it as a www,

15 dub, dub, dub function. And so you can either call 12:51:27

16 the table, or you can run this function that

17 performs the lookup and pulls from TAO for newly

18 created IDs.

19 So it's as opposed to querying the table,

20 this is software functionality that you can call 12:51:47

21 for what you're trying to do.

22 MS. WEAVER: Okay. Thank you.

23 And now why don't you take a look at

24 Exhibit 347.

25 ///// 12:52:05

1 (Exhibit 347 was marked for 12:52:05  
2 identification by the court reporter and is  
3 attached hereto.)

4 MS. WEAVER: And while it's loading, I  
5 will admit and apologize, that this was the 12:52:09  
6 document I was reading from earlier inadvertently.

7 For the record, it bears Bates number  
8 ADVANCE-META-26 to -27.

9 Q. (By Ms. Weaver) And when you have a  
10 moment to review it, please just tell me what it 12:52:23  
11 is.

12 A. Okay. I've just loaded it. I will  
13 review it now.

14 Q. Okay.

15 A. This appears to be Revision No. 47176393 12:52:58

16 

17 Q. And do you use a reference to user  
18 identifying information there?

19 A. I -- I see -- I do see user identifying  
20 information or UII a few times in the document. 12:53:28

21 Q. And what is UII?

22 A. UII would include information like -- I  
23 know it's laid out in the UDDP -- and we could  
24 refer to the document. But just generally, it's  
25 information that could be used to identify me. 12:53:51

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1                   And I think some examples that I had                   12:53:54  
2                   given before, to just enforce those, would be -- an  
3                   IP address might be some kind of device  
4                   information. It -- it's any of that information  
5                   that might live in a table that, like I said,                   12:54:07  
6                   could -- could tie back to something identifiable.

7                   (Exhibit 348 was marked for  
8                   identification by the court reporter and is  
9                   attached hereto.)

10                  MS. WEAVER: Okay. And I'm going to mark                   12:54:20  
11                  as Exhibit 348, tab 99, Josh. And we'll turn to  
12                  that in a second.

13                  Q. (By Ms. Weaver) But focusing on  
14                  Exhibit 347, the one that you have open, do you see  
15                  that this document refers to device identifiers?                   12:54:34

16                  And, again, that's three paragraphs down  
17                  under the word "Overview."

18                  A. Okay. By the way, some of those specific  
19                  examples I was looking for in the last one, emails,  
20                  IP addresses, names, location, cookies are other                   12:54:51  
21                  examples of UII.

22                  Q. Perfect.

23                  A. And what was your question?

24                  Q. Do you see a reference to device  
25                  identifiers?                   12:55:01

1 A. In the first paragraph? 12:55:07

2 Q. In the third paragraph, below the word  
3 "Overview."

4 A. Yes.

5 Q. Okay. What's a device identifier? 12:55:14

6 A. While I didn't specifically prepare for  
7 that as part of my testimony as a representative of  
8 Facebook, in my personal experience, an example  
9 of -- of a device identifier would be like a set of  
10 information that uniquely identifies one device 12:55:42  
11 versus another.

12 Q. Do you know what an IDFA is?

13 MR. BLUME: Objection. Form. Scope.

14 THE DEPONENT: I didn't prepare for that  
15 as part of my represen- -- as part of my testimony 12:55:57  
16 as a representative of Facebook.

17 In my personal experience, I know  
18 generically what it is. But I don't have  
19 experience working with IDFA.

20 Q. (By Ms. Weaver) Okay. Is an IDFA an 12:56:09  
21 identifier for an Apple device?

22 MR. BLUME: Objection. Form. Scope.

23 THE DEPONENT: I didn't prepare for that  
24 as part of my testimony as a representative of  
25 Facebook. 12:56:22

1 But in my personal experience, that is -- 12:56:22  
2 that is the extent of my understanding for what an  
3 IDFA is.

4 Q. (By Ms. Weaver) Okay. So you were  
5 prepared to testify about Exhibit 347, but you 12:56:31  
6 weren't prepared to testify about the sentence that

7 [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] 12:56:47

11 MR. BLUME: Objection. Form.

12 THE DEPONENT: I was prepared to talk  
13 about the processes for the deletion of those  
14 identifiers.

15 Q. (By Ms. Weaver) Okay. Can you -- can 12:57:05  
16 [REDACTED]  
[REDACTED]  
[REDACTED]  
19 behalf of Facebook on this topic?

20 MR. BLUME: Objection. Form. Scope. 12:57:21

21 THE DEPONENT: While I didn't  
22 specifically prepare for this as part of my  
23 testimony on behalf of representing Facebook, in my

24 [REDACTED]  
[REDACTED] 12:57:35

1

2

3

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7

Q. (By Ms. Weaver) What is a hash?

8

A. While I didn't prepare for that

9

specifically as part of my testimony as a

10

representative of Facebook, in my personal

12:58:05

11

capacity, a hash is where I represent a series of

12

information or -- or, you know, like a series of

13

words or descriptors in a common mathematical

14

formula that -- that comes out as some size of hash

15

that's defined by size. It might be 64-bit hash

12:58:25

16

that means there's 64 characters that were

17

generated as part of that and...

18

Q. And the purpose of hashing is

19

pseudonymization, correct?

20

A. No.

12:58:40

21

Q. Could it -- sorry.

22

A. So specifically -- specifically, the

23

purpose of building a hash is so that I have --

24

just technically and specifically a hash -- which I

25

did not prepare as part of my testimony as a

12:58:51

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1 Facebook representative. 12:58:53

2 But in my personal capacity, the reason I  
3 build a hash is so that I can quickly index and  
4 store information to match an index between two  
5 types of things without having to match to the 12:59:07  
6 original. It's much more technically efficient in  
7 order to do that.

8 Q. Is it part of a re-identification process  
9 then?

10 A. The -- could you -- could you be more 12:59:18  
11 specific in your question?

12 Q. What does re-identification mean?

13 A. Re-identification is the -- when  
14 something has been de-identified in a way -- and  
15 this would have to be done up front -- that the 12:59:36  
16 re-identification -- that the de-identification is  
17 done in such a way that there is either a key or  
18 some capability to, in some point in the future,  
19 re-identify what the source was that had been  
20 de-identified. 12:59:54

21 Q. So when you described a hash is a way to  
22 index and store information to match an index  
23 between two types of things, is that a form of  
24 re-identification?

25 A. No. 01:00:06

1 Q. Why not? 01:00:07

2 A. They are very different technical  
3 concepts and -- and -- and just -- they're --  
4 they're not -- it's not even apples and oranges.

5 It's -- it's apples and potatoes. It's -- it's 01:00:24

6 something entirely different. A hash is a  
7 technical concept and a technical function.

8 Re-identification is a process.

9 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

12 about?

13 MR. BLUME: Objection. Form.

14 THE DEPONENT: There are technical  
15 safeguards in place around looking for inauthentic 01:00:55  
16 behavior, for instance. And -- and part of the  
17 ability to -- I didn't -- I -- I didn't  
18 specifically prepare for this as part of my  
19 testimony as a representative of Facebook.

20 But in my personal capacity, there -- 01:01:14

21 there are challenges like inauthentic behavior

22 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

01:01:34

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1 And in order to build systems to evaluate 01:01:37  
2 from -- from both a security and an integrity  
3 [REDACTED]  
4 [REDACTED]  
5 [REDACTED] [REDACTED]  
6 [REDACTED]  
7 [REDACTED]  
8 [REDACTED]  
9 Q. (By Ms. Weaver) Okay. Is it your  
10 testimony that in Exhibit 347, which describes the 01:02:09  
11 [REDACTED]  
12 prepared to describe, that the description of  
13 device identifiers was done to identify abusive  
14 behavior or was it done to try to anonymize data?  
15 A. You're asking two very different 01:02:36  
16 questions.  
17 Would you ask those questions  
18 independently.  
19 Q. Absolutely.  
20 In Exhibit 347, which describes the 01:02:42  
21 [REDACTED]  
22 prepared to discuss here today, and is in your  
23 notes, it refers to hashing device identifiers.  
24 What is your understanding of the purpose  
25 of describing hashing identifiers -- device 01:02:59

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1 identifiers in this document? 01:03:03

2 A. Specifically, in my role as -- as  
3 preparing for this testimony, the process of  
4 Hive Anon running on device identifiers is to

5 [REDACTED] [REDACTED]

6 [REDACTED] [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED] [REDACTED]

11 [REDACTED]

12 Q. And if the --

13 (Simultaneously speaking.)

14 THE DEPONENT: I'm talking about --

15 I'm -- 01:03:47

16 Q. (By Ms. Weaver) Oh, I'm sorry.

17 Go ahead.

18 THE DEPONENT: -- speaking to

19 [REDACTED]

20 pseudonym -- pseudonymization process of -- of 01:03:55

21 this.

22 Q. (By Ms. Weaver) Okay. And if device

23 [REDACTED]

24 [REDACTED]

25 hashed, would it be possible to search Hive using 01:04:24

1 device identifiers -- well, strike that. That's a 01:04:28  
2 bad question.

3 In general, can you search Hive using  
4 device identifiers?

5 MR. BLUME: Objection. Form. Scope. 01:04:36

6 THE DEPONENT: I -- I think in -- in  
7 general, the -- all like -- I didn't specifically  
8 prepare for that as part of my testimony, as a  
9 representative of Facebook.

10 But in my personal capacity, the 01:04:50  
11 questions that ask generically if it's possible to  
12 query Hive, I'll continue to caveat with, if I know  
13 a table and I know where that data is located, I  
14 can query the specific table.

15 And when I query that specific table, if 01:05:07

16 [REDACTED]

17 ID across that time period.

18 Q. (By Ms. Weaver) And if --

19 [REDACTED]

20 Q. I'm sorry. I'm sorry. 01:05:22

21 [REDACTED]

22 couldn't query across the entire time period of  
23 that table for that device ID because it would only  
24 match in 10-day chunks, and all other information  
25 that would help make it re-identifiable in any way 01:05:43

1

2

3

Q. Perfect.

4

Turning back briefly to Exhibit 346 -- I

5

just meant to follow up.

01:05:59

6

7

8

9

Do you see that?

10

A. I do see that.

01:06:20

11

Q. What is a dating profile?

12

A. When the dating product was added to

13

Facebook, one of the potential concerns is when I'm

14

in the dating app, I don't have visibility to who

15

the person's actual profile is so that I can have

01:06:42

16

safe conversations, until at some point I want to

17

match with someone.

18

Part of doing that inside the app was not

19

presenting the user ID in any of that

20

functionality, or links back to the user profile,

01:06:58

21

so that that -- the dating app could live outside

22

of that, and if the person chose to share at some

23

point in the future with whoever they were chatting

24

with, they could.

25

01:07:11

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1

2

3

4

5

dating app, it's never mapped directly to it. And  
it's also severed, any time I delete my account,  
any dating activity that there was.

01:07:31

6

Q. And why does Facebook do that?

7

MR. BLUME: Objection. Form. Scope.

8

9

10

11

12

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14

15

16

17

18

19

Q. (By Ms. Weaver) Okay.

20

A. It's also -- that's the technical reason.

01:08:25

21

22

23

24

25

In addition, we have policies to also  
protect the user ID. And part of having a privacy  
program and -- and training Facebook internal  
engineers and every employee on that privacy  
program is to abide by that. And so it's both

01:08:41

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1 technical and process protections to protect the 01:08:44  
2 user ID.

3 Q. And that's because a user ID can  
4 personally and immediately identify a person,  
5 correct? 01:08:52

6 A. That is an active user, correct.

7 Q. And if you'd turn now to what's been  
8 marked as Exhibit 348, is this the definition of  
9 UII you were thinking of earlier?

10 A. I just loaded it and I'm reading it. 01:09:26

11 Q. Yeah.

12 The question -- the first question is,  
13 what is Exhibit 348, and when you're ready for it.

14 A. So this appears to be a --  
15 Revision 52569136 of the internal Wiki page called 01:09:47  
16 "What is UII?"

17 Q. And is this Facebook's definition of UII  
18 currently?

19 A. Unfortunately, when I read this document  
20 and I look at the "What is UII," there's a Wiki 01:10:08  
21 "Redirect to Privacy/UII\_Definition\_0."

22 And so this document looks incomplete.

23 Q. So we would need that hyperlink for you  
24 to be able to answer if this is Facebook's  
25 definition of UII? 01:10:32

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1	A. That is correct.	01:10:37
---	---------------------	----------

2 Q. Okay. Let me ask you this question.

```
3         When was the last time you saw this
4     document?
```

5           A. I would need to go refer to my notes to           01:10:48  
6 see if I saw this one.

7 Q. Okay. Go ahead and refer to your notes.

8                   A.    I -- I just honestly -- I -- I don't  
9    think --

10	Q. I think it's fine to look at your notes.	01:10:57
----	---	----------

11           A.    I don't know that I had in my notes which  
12       documents -- I would -- I would need to physically  
13       go look in the binder to see if I saw this one.

14 Q. Okay. I'll try to see if opposing  
15 counsel produced that document. 01:11:12

16 But while we're working on that, I wanted  
17 to ask a couple questions about Exhibit 348.

18           A. Specifically, the example earlier that I  
19       was looking for?

20	Q. Uh-huh.	01:11:32
----	------------	----------

21           A.     And the question you answered -- or  
22           asked, was in 347, under "Overview," where there  
23           were just examples of what UII -- that have been  
24           generated in more than 90 days ago, included  
25           emails, IP addresses, names, locations, cookies.

1 Q. And when you say "cookies," what do you 01:11:48  
2 mean?  
3 A. Web browser cookies.  
4 Q. Such as?  
5 MR. BLUME: Objection. Form. 01:11:58  
6 THE DEPONENT: Cookies that Web browsers  
7 use for the sake of authentication or similar  
8 functions.  
9 Q. (By Ms. Weaver) Facebook uses cookies,  
10 right? 01:12:18  
11 A. Facebook does use cookies.  
12 Q. And what Facebook cookies are you aware  
13 of --  
14 MR. BLUME: Objection. Form.  
15 Q. (By Ms. Weaver) -- that are UII? 01:12:27  
16 MR. BLUME: Objection. Form.  
17 THE DEPONENT: I can't actually recollect  
18 without looking at my -- looking at -- looking back  
19 in some of the prior documents. I -- there's --  
20 there's a variety of -- there's -- there's a number 01:12:46  
21 of different cookies.  
22 Q. (By Ms. Weaver) Okay. Are you familiar  
23 with the datr cookie?  
24 A. I'm familiar with the datr cookie.  
25 Q. And datr -- 01:12:57

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1 A. D-A -- sorry -- D-A-T-R. 01:12:59

2 Q. Yes.

3 What is the datr cookie?

4 MR. BLUME: Objection. Form. Scope.

5 THE DEPONENT: The datr cookie is a 01:13:13

6 unique browser identifier.

7 Q. (By Ms. Weaver) And when you say it's a

8 "unique browser identifier," is it unique to

9 browsers, or is it unique to a specific visit by a

10 device to a browser? 01:13:35

11 MR. BLUME: Form.

12 THE DEPONENT: That -- that question is

13 technically inaccurate. If you could ask it in a

14 different way.

15 Q. (By Ms. Weaver) Well, let me put it this 01:13:47

16 way. Sometimes cookies have lots of different

17 identifiers contained in them. Datr -- the cookies

18 can have the identifier of the browser and the

19 device ID and a number of things.

20 I'm asking what information is contained 01:13:59

21 in the datr cookie?

22 A. The datr cookie specifically is tied to

23 the browser.

24 Q. And the browser only?

25 A. It is -- it is the browser as it exists. 01:14:13

1 And -- and so it's -- it's -- it's the browser as 01:14:15  
2 it's operating.

3 Q. Okay. And you're aware of other Facebook  
4 cookies as well; is that right?

5 A. I am. I would need to refresh my 01:14:27  
6 recollection.

7 Q. And how would you refresh your  
8 recollection?

9 A. I would -- there's -- I would -- I'd  
10 probably look back at the filing I helped put 01:14:42  
11 together which described all the Facebook cookies  
12 from before.

13 Q. Do you mean --

14 A. I just don't remember the names of all of  
15 them. 01:14:55

16 Q. Do you mean your notes?

17 A. No, I do not mean -- mean my notes. I --  
18 the --

19 Q. What filings did you put together which  
20 described all the Facebook cookies from before? 01:15:02

21 A. Not that I personally put together. It  
22 was one that -- as Facebook, we had put together  
23 that had all of them -- provided clarity on the  
24 names and descriptions of all of them. And I  
25 just -- I'm struggling to remember the names of all 01:15:22

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1 the cookies. 01:15:25

2 Q. Where is that document?

3 A. In a binder sitting across the room.

4 Q. Can you look at the document?

5 A. Yeah. 01:15:35

6 MR. BLUME: Objection. Form.

7 MS. WEAVER: Mr. Blume, will you allow

8 him to look at the document that he needs to

9 testify regarding these cookies?

10 MR. BLUME: Objection to the scope of the 01:15:46

11 list of cookies as it relates to topic 4.

12 MS. WEAVER: I sent an email identifying

13 these cookies, and I'm assuming that's why he

14 prepared this.

15 Why don't we go off the record. 01:16:00

16 SPECIAL MASTER GARRIE: Actually, let's

17 wait.

18 MS. WEAVER: Okay.

19 SPECIAL MASTER GARRIE: I actually was on

20 these emails -- I was on these emails exchanged as 01:16:07

21 a Special Master, and I'm just a bit -- is that --

22 before we just say this emails and cookies, do you

23 want to -- are we all on the same page when we say,

24 did you receive the emails, Counsel Blume? And are

25 we talking apples to apples with regards to the 01:16:25

1 exhibit. 01:16:28

2 So Counsel, we identified multiple

3 cookies. You extend that to Counsel Blume,

4 correct?

5 MS. WEAVER: Yes. 01:16:37

6 SPECIAL MASTER GARRIE: Now, you're

7 asking about those specific cookies, not other

8 cookies, correct?

9 MS. WEAVER: Yes.

10 SPECIAL MASTER GARRIE: Okay. So then 01:16:42

11 have you -- and I believe those cookies we're

12 discussing are the ones that -- we -- that you

13 emailed about are the ones we're discussing now,

14 correct?

15 MS. WEAVER: Yes. 01:16:52

16 SPECIAL MASTER GARRIE: Okay. And

17 then --

18 MR. BLUME: Do you want to put those up?

19 SPECIAL MASTER GARRIE: Well, before --

20 she can share with the email but -- or we can enter 01:16:58

21 it into the record. But I just want to make sure I

22 understand before I -- before we go off the record,

23 that I understand what -- what's occurring.

24 So now, you're asking the witness about

25 those cookies. And Mr. Clark, when you said 01:17:14

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1 "cookies," were you referring -- you were referring 01:17:16  
2 to the cookies that Counsel Weaver was asking you  
3 about, correct?

4 THE DEPONENT: I was given an open-ended  
5 question on a list of cookies. And I just couldn't 01:17:26  
6 recollect the list of cookies. And so I -- I'm not  
7 aware of --

8 SPECIAL MASTER GARRIE: That's why I'm  
9 confused.

10 THE DEPONENT: Yeah. 01:17:31

11 SPECIAL MASTER GARRIE: So when we're  
12 saying list of cookies --

13 THE DEPONENT: Yeah.

14 SPECIAL MASTER GARRIE: -- what do you  
15 mean by "list of cookies"? 01:17:35

16 MS. WEAVER: You're asking me?

17 SPECIAL MASTER GARRIE: Like what I'm  
18 confused is, Counsel --

19 MS. WEAVER: I want to ask this --

20 SPECIAL MASTER GARRIE: -- when you were 01:17:39  
21 emailed a list of cookies to Counsel Blume, we were  
22 talking about those cookies. But you said "list of  
23 cookies," and I was just -- I just -- I want to  
24 make sure we're all talking about the same cookies.

25 MS. WEAVER: Let me be clear. I am 01:17:53

1 seeking to elicit testimony about the cookies that 01:17:54  
2 I emailed Mr. Blume about. It seemed to me that  
3 Mr. Clark had prepared regarding those cookies,  
4 Rob, and --  
5 SPECIAL MASTER GARRIE: That's what I -- 01:18:05  
6 that's what I'm trying to figure out.  
7 MS. WEAVER: Yeah.  
8 SPECIAL MASTER GARRIE: That it's not  
9 other cookies that aren't related to the ones you  
10 asked about. That's... 01:18:11  
11 MS. WEAVER: Is there a document  
12 that the --  
13 MR. BLUME: And so put that -- if we put  
14 that --  
15 MS. WEAVER: Can I -- can I just ask, is 01:18:14  
16 there a document that the witness prepared in  
17 response to the questions I asked about those  
18 cookies?  
19 SPECIAL MASTER GARRIE: Maybe you could  
20 provide -- 01:18:22  
21 (Simultaneously speaking.)  
22 MR. BLUME: The list --  
23 SPECIAL MASTER GARRIE: -- that email  
24 with the list of the cookies just so we're all on  
25 the same page. 01:18:26

1 I apologize, Counsel Weaver, but -- I do 01:18:27  
2 recollect it. But I don't -- I don't have it right  
3 before me right now.  
4 MS. WEAVER: You want me to just email it  
5 around, Special Master Garrie, right now? 01:18:35  
6 SPECIAL MASTER GARRIE: Well, if you can  
7 put it on the screen so we can all see it --  
8 MR. BLUME: Put it on the screen.  
9 SPECIAL MASTER GARRIE: -- that would be  
10 helpful. Because it is, it is helpful. 01:18:42  
11 (Discussion off the stenographic record.)  
12 MS. WEAVER: Can we go off the record? I  
13 just need to find this.  
14 SPECIAL MASTER GARRIE: We can go off the  
15 record while you find it, of course. 01:19:27  
16 MR. BLUME: Should we break for lunch?  
17 MS. WEAVER: No. I'm in the middle of  
18 questioning.  
19 SPECIAL MASTER GARRIE: No.  
20 MR. BLUME: Okay. Okay. Just a 01:19:35  
21 suggestion.  
22 SPECIAL MASTER GARRIE: We're in the  
23 middle of a question.  
24 MR. BLUME: Just a suggestion. Okay.  
25 SPECIAL MASTER GARRIE: Forget it. 01:19:39

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1 MR. BLUME: Okay. 01:19:39

2 THE VIDEOGRAPHER: Okay. We're off the

3 record. It's 1:19 p.m.

4 (Recess taken.)

5 THE VIDEOGRAPHER: We're back on the 01:25:27

6 record. It's 1:25 p.m.

7 Q. (By Ms. Weaver) What information does

8 the datr cookie hold?

9 MR. BLUME: Objection. Form. Scope.

10 THE DEPONENT: While I didn't 01:25:42

11 specifically prepare for this as part of my

12 representation -- as being a representative of

13 Facebook, in my personal experience, datr cookie is

14 a cookie that tracks the browser as a unique

15 identifier for the browser. 01:26:01

16 Q. (By Ms. Weaver) Does the datr cookie

17 contain a URL?

18 A. I didn't specifically prepare for that as

19 part of my testimony, as a representative of

20 Facebook, but in my personal experience, I -- I do 01:26:21

21 not believe it contains any URL, but I don't know.

22 (Exhibit 349 was marked for

23 identification by the court reporter and is

24 attached hereto.)

25 Q. (By Ms. Weaver) Okay. Take a look at 01:26:27



1 Exhibit 349, and tell me if this is the document 01:26:29  
2 that you were referring to a moment earlier.  
3 A. I've got the document open and I'm  
4 looking.  
5 Q. And I think it's on the sec- -- third -- 01:26:54  
6 page 3.  
7 A. That is the document I was referring to.  
8 Q. And you were involved in the creation of  
9 this document; is that right?  
10 A. I did assist counsel in the creation of 01:27:11  
11 this document.  
12 Q. Did you assist counsel in the  
13 identification of cookies?  
14 MR. BLUME: Objection, to the extent your  
15 involvement involves conversation with counsel, 01:27:19  
16 it's privileged.  
17 And I instruct you not to answer.  
18 And work product.  
19 Q. (By Ms. Weaver) Okay. Fine. I'll ask  
20 this. 01:27:34  
21 Did you provide information about what  
22 the datr cookie is?  
23 A. No.  
24 Q. Do you know who did?  
25 MR. BLUME: Objection. To the extent you 01:27:46

1 know as a result of conversations with counsel, I'd 01:27:47  
2 instruct you not to answer.

3 THE DEPONENT: I only know that because  
4 it was part of the conversation with counsel.

5 MS. WEAVER: Rob, your position is you 01:28:03  
6 telling him who knows about the datr cookie is  
7 privileged; is that right?

8 MR. BLUME: No. Your question was, who  
9 gave the information with regard to this letter  
10 about datr -- datr cookies. That's privileged. 01:28:12

11 MS. WEAVER: Okay.

12 MR. BLUME: To the extent he knows that  
13 information from discussions with counsel.

14 Q. (By Ms. Weaver) You're not prepared to  
15 testify about the datr cookie, is that right, 01:28:23  
16 Mr. Clark?

17 MR. BLUME: Object -- objection. Form.

18 THE DEPONENT: I'm not prepared to  
19 testify about the datr cookie as a representative  
20 of Facebook. Only from personal experience. 01:28:39

21 Q. (By Ms. Weaver) And you, from personal  
22 experience, don't -- well, strike that.

23 Do you know how -- what -- strike that.

24 Do you know how the datr cookie  
25 identifies a Web browser? 01:28:52

1           A.    It -- I'm not prepared to answer that as           01:28:55  
2   part of testifying as a representative of Facebook.  
3   But in my personal experience, that -- the  
4   datr cookie is a generated unique identifier to a  
5   browser. How that occurs and -- and exactly the           01:29:09  
6   content in it, I do not know.

7           Q.    Who would know?

8           A.    I -- I -- I am not prepared to testify to  
9   that as a representative of Facebook. In my  
10   personal experience, I don't have a specific name           01:29:25  
11   that I would know that would know that part of the  
12   process.

13          Q.    Can you -- can you identify anybody that  
14   you work with at Facebook who knows how the datr  
15   cookie functions?           01:29:41

16          A.    As of -- I -- I didn't prepare for that  
17   as part of my testimony as a representative of  
18   Facebook. But in my personal experience, I -- I  
19   would go look up who I would need to, to go have  
20   that conversation. I don't -- I don't know a name           01:29:59  
21   offhand.

22          Q.    Okay. Do you know -- okay. Strike that.  
23                  What is the fpb cookie?

24          A.    I didn't specifically prepare for that as  
25   part of my testimony representing Facebook. But in           01:30:14

1 my personal experience and -- I -- I would refer to 01:30:17  
2 the -- I would refer to the filing for that detail.

3 The underscore FB cookie is set on the  
4 third-party domain only if the advertiser/publisher  
5 has installed the Facebook pixel business tool and 01:30:28  
6 opted into the use of these cookies.


7 The cookie has its own -- or has a  
8 browser identifier and -- and in the epoch time  
9 when the cookie was created. And then for  
10 additional details, there's documentation on the 01:30:43  
11 external developer Facebook side.

12 Q. And you said the epoch time?

13 It's a little unclear. I just didn't  
14 understand what you said.

15 A. The -- yeah, it's -- it's E-P-O-C-H. 01:31:01  
16 It's -- it's a time commonly used in -- in computer  
17 languages and UNIX time systems. The -- the time  
18 since -- and I should know it offhand -- but  
19 sometime in 1969 or 1970, and the number of  
20 seconds that's -- 01:31:21

21 Q. Sorry. It's just that I couldn't  
22 understand you and it didn't come through on the  
23 transcript. That's fine.

24   
25 MR. BLUME: Objection. Form. Scope. 01:31:34

1 THE DEPONENT: I didn't prepare to 01:31:37  
2 specifically talk about that as a representative of  
3 Facebook.

4 But in my personal experience, those are

5 [REDACTED] [REDACTED]

6 [REDACTED] [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 Q. (By Ms. Weaver) Do third parties

10 [REDACTED] [REDACTED]

11 [REDACTED]

12 A. I didn't specifically prepare to talk to

13 that as a representative of Facebook.

14 But in my personal experience, those

15 cookies are only scoped to Facebook.com. So third 01:32:15

16 parties should not have access to that.

17 Q. They are not supposed to have access to

18 the Facebook user ID is your testimony?

19 MR. BLUME: Objection. Form. And scope.

20 THE DEPONENT: I didn't specifically 01:32:34

21 prepare for that as part of my testimony.

22 But in my personal experience, that --

23 that question is very, very generic and -- and --

24 and inaccurate.

25 [REDACTED] 01:32:46

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authorized or should not have access to those  
cookies in the browser as they're scoped to  
Facebook.com.

01:33:07

And to further reiterate, that is why we  
have third-party application-scoped IDs and other  
kinds of IDs, so that we don't give third parties  
the canonical Facebook user ID.

Q. (By Ms. Weaver) You're referring to the  
ASID; is that correct?

01:33:26

A. That is correct.

Q. Okay. We'll come back to that.

Why did Facebook create -- well, strike  
that.

01:33:35

You said that the -- the fbc cookie is  
used for authentication.

How does that function?

MR. BLUME: Objection. Form. Beyond the  
scope.

01:33:46

THE DEPONENT: That -- that wasn't what I  
said. I didn't specifically prepare for that as  
part of my testimony.

But in my personal experience, the  
xs/c\_user and xs c\_user cookies are what are used

01:33:56

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1 for authentication and identify for users logged 01:34:03  
2 in.

3 The\_fbc cookie is a cookie that is set on  
4 third-party domain only if the advertiser and  
5 publisher has installed the Facebook pixel business 01:34:15  
6 tool. And it is set only if the click originated  
7 from the Facebook service.

8 For instance, when clicking on an ad in  
9 Facebook newsfeed. And the\_fbc cookie contains an  
10 encrypted user ID. 01:34:32

11 Q. (By Ms. Weaver) And who encrypts the  
12 user ID?

13 MR. BLUME: Objection. Form. Scope.

14 THE DEPONENT: I didn't prepare for that  
15 as part of my testimony. 01:34:43

16 In my personal experience, I don't know.

17 Q. (By Ms. Weaver) Okay. And so just  
18 the record -- so the record is clear, you did not  
19 prepare to testify regarding the fpb cookie,

20 [REDACTED] [REDACTED]  
[REDACTED] [REDACTED]

22 MR. BLUME: Objection. And to the extent  
23 the question asks for preparation beyond topic 4 is  
24 beyond the scope.

25 THE DEPONENT: I did not. As a -- as a 01:35:19

1 representative of Facebook, I didn't prepare for 01:35:20

2 that topic.

3 Q. (By Ms. Weaver) And did you prepare for

4 whether or not those cookies contained information

5 such as fbid, fbtype or URL? 01:35:26

6 MR. BLUME: Same objection.

7 Q. (By Ms. Weaver) Are you answering the

8 question?

9 A. As a part of my preparation, as a

10 representative of Facebook, I did not prepare for 01:36:03

11 that.

12 Q. Did you prepare to discuss the datr

13 cookie?

14 MR. BLUME: Objection, to the extent the

15 question seeks information beyond topic 4 is beyond 01:36:17

16 the scope.

17 THE DEPONENT: As a part of my

18 representation as a representative of Facebook, I

19 did not prepare for that. But did share -- from my

20 personal experience. 01:36:30

21 MS. WEAVER: Okay. We'll move on.

22 Q. (By Ms. Weaver) Do you know who at

23 Facebook would be qualified to discuss those

24 cookies?

25 MR. BLUME: Objection. Form. 01:36:47



1 THE DEPONENT: As a representative of -- 01:36:52  
2 as my preparation as a representative of Facebook  
3 for this testimony, I didn't prepare for that.

4 In my personal experience, I -- I do not  
5 have a name. 01:37:03

6 Q. (By Ms. Weaver) Okay. Going back to  
7 Exhibit 348.

8 Let me just ask a question. You  
9 testified a moment ago that there was a binder in  
10 the room that you used to prepare -- prepare that 01:37:21  
11 included Exhibit 349; is that right?

12 A. Yes.

13 Q. And you reviewed and -- and recalled that  
14 it referenced cookies, right?

15 A. That is correct. 01:37:45

16 Q. Did -- did you discuss whether you would  
17 testify regarding those cookies?

18 MR. BLUME: Objection. Form.

19 THE DEPONENT: I did not.

20 Q. (By Ms. Weaver) Okay. Going back to 01:37:59  
21 348.

22 Do you see that there's a reference in  
23 the first paragraph -- I'm sorry. Okay.

24 [REDACTED]

[REDACTED] 01:38:20

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4

Do you see that?

5

A. I do see that.

01:38:34

6

7

8

Do you see that?

9

A. I do see that.

10

Q. What does that mean?

01:38:45

11

A. I'll use an example that I -- that I used

12

earlier.

13

I think when I upload a photo to the

14

service -- I upload the photo. I might attach a

15

description to that photo. That photo will get

01:39:06

16

likes and reactions and comments and other things.

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01:39:56

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01:41:04

16

MS. WEAVER: Okay. Let's mark exhibit --

17

tab 92, please.

18

(Exhibit 350 was marked for

19

identification by the court reporter and is

20

attached hereto.)

01:41:10

21

Q. (By Ms. Weaver) And let me know when

22

you've had a chance to review it.

23

A. I still haven't had anything show up.

24

MS. WEAVER: It has for us.

25

THE DEPONENT: Oh, there it is. It just

01:41:53

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1 came in. 01:41:53

2 Q. (By Ms. Weaver) Do you recognize  
3 Exhibit 350?

4 A. Let me read it.

5 Okay. I've had a chance to read it. 01:42:22

6 Q. Great.

7 What is Exhibit 350?

8 A. Exhibit 350 appears to be a Wiki page  
9 titled "Overview," which is Revision 57833386 from  
10 the internal Facebook Wiki. 01:42:38

11 Q. And so does it reflect Facebook's

12 [REDACTED]

13 A. I -- as -- as opposed to procedure, I --  
14 I -- I read this as an overview, a description.

15 Q. And what is it describing? 01:43:06

16 A. A high-level overview of Hive Anon.

17 [REDACTED]

18 A. It -- it's a providing a high-level

19 [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] 01:43:43

1 [REDACTED] 01:43:49

2 Q. Okay. And looking at the second page of  
3 the document, at Bates number -31, what does that  
4 diagram reflect?

5 [REDACTED] [REDACTED]

[REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED]

[REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED]

12 Q. Okay. I'm going to try to get --

13 A. To those --

14 Q. I'm sorry. Go ahead.

15 A. No. 01:44:43

16 MS. WEAVER: So I'm going to try to --

17 Josh, can you try to screen share this diagram.

18 MR. SAMRA: Yep. Give me a second.

19 Q. (By Ms. Weaver) Looking at this same

20 page, it gives a couple of examples; is that right? 01:45:02

21 A. Yes.

22 Q. And can you describe what -- how the

23 [REDACTED]

24 A. Yes.

25 So it appears that this example is -- if 01:45:28

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[illegible]

01:47:28

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1

[REDACTED] [REDACTED] [REDACTED]

2

[REDACTED]

3

[REDACTED]

4

[REDACTED] [REDACTED]

5

[REDACTED]

[REDACTED]

6

[REDACTED]

7

[REDACTED] [REDACTED]

8

[REDACTED] [REDACTED]

9

[REDACTED]

10

[REDACTED]

01:48:15

11

Q. Okay.

12

[REDACTED]

13

[REDACTED]

14

[REDACTED]

15

[REDACTED]

[REDACTED]

16

[REDACTED]

17

[REDACTED]

18

Q. Okay. And if he does not delete his

19

[REDACTED]

20

right?

01:48:53

21

[REDACTED]

22

[REDACTED]

23

Q. Okay. And looking at the diagram, can

24

you describe what the diagram is reflecting?

25

Is that showing where the script is

01:49:07

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1 running? 01:49:09

2 A. Yeah. It's -- it's a -- it's a very poor

3 engineering diagram trying to explain these

4 concepts which are in bullets right above, which --

5 where it talks about how it works. At a high 01:49:42

6 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

24 Q. Thank you.

25 A. The -- the diagram is trying to 01:50:57



1 demonstrate that, but poorly. 01:51:00

2 Q. Okay. And what is Scribe?

3 A. Scribe is a software development tool. I  
4 didn't specifically prepare as part of my testimony  
5 to answer what scribe was, as a representative of 01:51:24  
6 Facebook. But in my personal experience, Scribe is  
7 a developer tool.

8 Q. And what is it used for?

9 A. I -- I do not know.

10 [REDACTED] 01:51:40  
11 detect UII?

12 [REDACTED]

[REDACTED]

[REDACTED]

15 is -- is -- is purpose built to identify patterns 01:51:51  
16 of UII, through both manual rules, in addition to  
17 machine learning, to look for what might be UII  
18 in -- in any -- in any of those tables.

19 MS. WEAVER: Okay. Great.

20 We can take a break. 01:52:14

21 MR. BLUME: Lunch?

22 THE VIDEOGRAPHER: Okay. Off the record

23 it's 1:52 p.m.

24 (Recess taken.)

25 THE VIDEOGRAPHER: Okay. We're back on 01:53:32

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1 record. It's 1:53 p.m. 01:53:34

2 MR. BLUME: So with regard to topic 4,  
3 which speaks to the processes related to deletion,  
4 pseudonymization, de-identification,  
5 re-identification association and deletion of user 01:53:48  
6 data and information, as that relates to cookies,  
7 Mr. Clark is prepared to discuss whether Facebook  
8 uses cookies as identifiers; specifically,  
9 identifiers for users. And if so, how Facebook  
10 treats those cookies within the deletion framework. 01:54:07

11 It was -- it is -- it's our position that  
12 to discuss the processes of that deletion  
13 framework, to talk about the specific cookies, what  
14 they are specifically, what information they get is  
15 beyond the scope. 01:54:25

16 He's certainly prepared to talk about how  
17 the framework -- deletion framework deals with  
18 cookies, to the extent those cookies are  
19 identifiers. But not any specific cookie or its  
20 purpose or the information it gets. 01:54:37

21 SPECIAL MASTER GARRIE: He can do the  
22 high level, but getting into the technical ways of  
23 how the cookies operationally work within the  
24 different frameworks he describes is beyond the  
25 scope. 01:54:48

1                   Is that what -- the gist of what we're                   01:54:49  
2                   getting at?

3                   MR. BLUME: Well, let -- let me clarify.

4                   He can talk about the -- the details of  
5                   how the deletion framework deals with cookies to                   01:54:55  
6                   the -- to the extent cookies are -- are  
7                   identifiers. But what is specific cookie seeks --

8                   SPECIAL MASTER GARRIE: That's what I  
9                   mean. The specific cookies that were emailed or  
10                  identified by plaintiffs, they identified a subset                   01:55:08  
11                  of specific cookies, those interworkings of how  
12                  those specific cookies interoperate with those  
13                  frameworks is -- he is not prepared to testify  
14                  about.

15                 MR. BLUME: Except to the extent that                   01:55:21  
16                 they --

17                 SPECIAL MASTER GARRIE: The technical.

18                 MR. BLUME: Right.

19                 Except to the extent that those cookies  
20                 are considered identifiers and -- and are part of                   01:55:26  
21                 the process.

22                 It doesn't matter what the specific  
23                 cookie is, as far as the deletion framework. Every  
24                 cookie would be treated the same way. And he's  
25                 prepared to talk about how the deletion framework                   01:55:41

1 deals with cookies as -- en masse. But any 01:55:43  
2 specific cookies, he -- is beyond -- we would argue  
3 is beyond the scope.

4 They're all treated the same way. Every  
5 cookie is treated the same way within the processes 01:55:55  
6 of pseudonymization, de-identification,  
7 re-identification, associations, deletion. It  
8 doesn't matter which cookie. They're all treated  
9 the same.

10 MS. WEAVER: So if I may -- 01:56:09  
11 (Simultaneously speaking.)

12 SPECIAL MASTER GARRIE: Didn't -- didn't  
13 he testify --

14 MS. WEAVER: The topic includes  
15 association. We identified, for example, the named 01:56:13  
16 plaintiffs' DYI files complaining -- containing  
17 datr cookies precisely so we could understand what  
18 data and information that's in the description.  
19 User data and information is expressed through  
20 those cookies, which the witness said and is 01:56:33  
21 factually correct, are identifiers.

22 So Facebook is collecting and tracking  
23 through the datr cookie which websites users visit,  
24 and I -- I attempted to get testimony about that  
25 today after sending -- 01:56:48

1 SPECIAL MASTER GARRIE: But he -- 01:56:50

2 MS. WEAVER: -- an email two weeks ago

3 to -- only to find out in the deposition that in

4 preparation here, counsel has not had the person

5 prepare on any of those cookies. 01:57:00

6 SPECIAL MASTER GARRIE: Well, one sec. I

7 don't want to -- let's not go down a rabbit hole

8 here because that's where we're heading and we

9 still have deposition left.

10 At the end of the day, prepared or not, 01:57:11

11 we can take that offline at a separate point. The

12 bottom line is the witness that's here now isn't

13 prepared to speak about those specific technical

14 cookies that are associated with this specific

15 topic, as it relates to how you just described it. 01:57:28

16 It is what it is, right?

17 MS. WEAVER: Yup, I understand.

18 SPECIAL MASTER GARRIE: But --

19 MR. BLUME: Hold on. Hold on.

20 Just to be clear, he's prepared to 01:57:36

21 testify about whether Facebook uses the datr cookie

22 as an identifier. That's -- so he can speak to

23 that.

24 SPECIAL MASTER GARRIE: But those were --

25 MR. BLUME: And then if so, how -- what's 01:57:44

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1       that? 01:57:47

2               SPECIAL MASTER GARRIE: Where -- where

3       I'm confused is those cookies she's referring to

4       are those, those things, like this is -- those are

5       the specific cookies that consist of what you're 01:57:53

6       talking about. So where I --

7               MR. BLUME: Right.

8               SPECIAL MASTER GARRIE: -- where I'm

9       getting confused is, those cookies that she

10       identified -- that are identified by plaintiffs 01:58:02

11       are -- I don't think all -- but a subset of the

12       exact topic you're talking about. But --

13               MR. BLUME: Any facts --

14               SPECIAL MASTER GARRIE: -- those are

15       technical tools -- 01:58:12

16               MR. BLUME: Well, but if -- if -- yeah.

17       Are the -- are -- is the following cookie -- does

18       Facebook consider the following cookie to be an

19       identifier. If yes, how does -- how does Facebook

20       deal with it within the deletion framework. 01:58:22

21               He's prepared to answer those questions.

22       But the -- but if -- if -- but the specific --

23       if -- if Facebook doesn't consider a specific

24       cookie to be an identifier, then it's not caught up

25       within the deletion framework, which is what he's 01:58:34

1 here to testify about. 01:58:37

2 MS. WEAVER: So he's only here about

3 deletion. But the topic talks about association of

4 user data and information. That's what the topic

5 says. 01:58:44

6 MR. BLUME: The processes of -- the --

7 the processes of pseudonymization,

8 de-identification, re-identification, association

9 and deletion of --

10 MS. WEAVER: Of -- 01:58:54

11 MR. BLUME: -- of user data --

12 MS. WEAVER: -- user data.

13 MR. BLUME: -- within that -- it's the

14 process --

15 MS. WEAVER: Association of user data and 01:58:58

16 information --

17 SPECIAL MASTER GARRIE: No, let me -- let

18 me --

19 MS. WEAVER: Yeah.

20 SPECIAL MASTER GARRIE: The part 01:59:01

21 that I -- so what she's saying is that those

22 cookies are used to associate with specific users

23 by Facebook as tools. And she's asking him

24 specific questions about those cookies that are

25 believed and been represented, I believe, to 01:59:14

1 associate user activity or make the association of 01:59:17  
2 a Facebook user and their activity. Those specific  
3 subset of cookies. And then --

4 MR. BLUME: Yes. If Facebook --

5 SPECIAL MASTER GARRIE: -- association is 01:59:29  
6 done via that cookie.

7 MR. BLUME: If Facebook -- if Facebook  
8 considers the particular cookie to be an identifier  
9 associated with a user and that -- and is part of  
10 that process, he's -- he is happy to talk about it. 01:59:40

11 SPECIAL MASTER GARRIE: But he can talk  
12 about those cookies.

13 MR. BLUME: He -- he can -- he can answer  
14 the question whether -- whether Facebook considers  
15 those cookies to be identifiers. It says -- 01:59:49

16 (Simultaneously speaking.)

17 SPECIAL MASTER GARRIE: But to know how  
18 they -- she wants -- the question is how does  
19 Facebook associate. How is that Facebook -- maybe  
20 I'm missing something. But I believe what's being 01:59:59  
21 asked is how is that association done by Facebook  
22 with those cookies. Like what is the process  
23 through which -- technical process through which  
24 Facebook makes an association.

25 Maybe I'm misreading or mishearing what 02:00:13

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1 plaintiffs are asking about. And my question is, 02:00:16  
2 can he talk about how -- maybe I'm  
3 misunderstanding.

4 Is he prepared to testify about the  
5 technical process of how Facebook makes those 02:00:25  
6 associations?

7 MR. BLUME: To the extent the -- by  
8 "association," you mean identify -- identifiers?  
9 In other words --

10 SPECIAL MASTER GARRIE: The user. 02:00:42

11 MR. BLUME: -- did he identify a user and  
12 how that -- how that information is then captured  
13 within these processes, as set forth in topic 4,  
14 yes.

15 SPECIAL MASTER GARRIE: So if we open up 02:00:52  
16 the cookie, we can -- he can walk us through how  
17 that cookie makes those associations?

18 MR. BLUME: No. He can identify whether  
19 or not these cookies are considered by Facebook to  
20 be identifiers, generally. Not how they work. But 02:01:04  
21 whether they are in the process, in the deletion  
22 framework, considered to be identifiers. In other  
23 words, used to identify the user.

24 SPECIAL MASTER GARRIE: Okay. The  
25 specific -- 02:01:14

1 MS. WEAVER: I think -- well, we can save 02:01:15  
2 for another day --  
3 SPECIAL MASTER GARRIE: The technical --  
4 he's not --  
5 MS. WEAVER: -- because it seems very 02:01:17  
6 clear that despite the fact that plaintiffs  
7 identified specific pages pulled out of the DYI  
8 file with datr cookies associated with the named  
9 plaintiffs, this witness does not -- according to  
10 the instructions of counsel, doesn't interpret the 02:01:34  
11 datr cookie to be an identifier for users. And for  
12 that reason, this witness is not prepared to  
13 testify on that topic.  
14 MR. BLUME: Well, you never asked -- you  
15 never asked him that question. Ask him that 02:01:47  
16 question.  
17 MS. WEAVER: Either way -- Rob, you  
18 excluded your preparation --  
19 MR. BLUME: No, ask him the question.  
20 THE COURT REPORTER: Hold on. Hold on. 02:01:52  
21 Hold on.  
22 SPECIAL MASTER GARRIE: No, you guys are  
23 doing this again. Time out. Time out.  
24 We'll go off the record and I'll reset  
25 everything. And I will take time away from -- take 02:02:00

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1 time and add time, so we may end up at zero. 02:02:02

2 But the point being is stop and listen to

3 each other. The net/net is that what Counsel Blume

4 is saying, the question you just asked,

5 Counsel Weaver, you can ask the question and hear 02:02:13

6 the answer.

7 Did I miss that, Counsel Blume?

8 MR. BLUME: That's correct. No, that is

9 absolutely correct.

10 SPECIAL MASTER GARRIE: And then based -- 02:02:22

11 based on that answer, Counsel Weaver, you may

12 find --

13 MS. WEAVER: I think he said that's

14 incorrect.

15 MR. BLUME: No, I said that's absolutely 02:02:28

16 correct. Ask him if he considers the datr cookie

17 to be an identifier. If so, how it fits in the

18 process. And ask for --

19 MS. WEAVER: But the question is

20 whether -- sorry. 02:02:36

21 The question is whether it's associated

22 with user data and information. That's the topic.

23 MR. BLUME: The --

24 MS. WEAVER: Facebook's process of

25 association of user data and information. 02:02:46

1 MR. BLUME: And -- and for purposes of 02:02:52  
2 pseudonymization, de-identification,  
3 re-identification, that association is identifiers.  
4 And so asking if it's -- if he considers it for  
5 purposes of the deletion framework, which is what 02:03:02  
6 he's here to testify, whether it's considered an  
7 identifier. If it is, it fits into the process.  
8 If it's not, then it doesn't. He's here to talk  
9 about that deletion, de-identification,  
10 pseudonymization and association with regard to 02:03:15  
11 those that -- and within that process. Just ask  
12 him the ordinary question.

13 SPECIAL MASTER GARRIE: That's a broad  
14 question.

15 MS. WEAVER: I'll just -- Special Master, 02:03:23  
16 I don't want to waste any more time. It's very  
17 difficult to take depositions and have arguments  
18 like this in the middle of a dep. So let's --

19 MR. BLUME: I agree.

20 MS. WEAVER: -- refer this to a different 02:03:32  
21 time. And I would just note -- have you pay  
22 attention, Rob, to the Oxford comma. In topic --  
23 in topic 4, there's a comma after association.

24 SPECIAL MASTER GARRIE: Wait. Wait.

25 MS. WEAVER: All of those topics are 02:03:42

1 individual. 02:03:43

2 SPECIAL MASTER GARRIE: I think -- I  
3 think you made a good point. We're not  
4 accomplishing anything here.

5 MS. WEAVER: Right. 02:03:48

6 SPECIAL MASTER GARRIE: I give 15  
7 minutes --

8 MR. BLUME: Right.

9 SPECIAL MASTER GARRIE: -- back to  
10 plaintiffs here because this was at my request. 02:03:50

11 I was just trying to see if we could  
12 avoid the downstream issue that looks inevitable,  
13 to come. So we will -- we will put a pin in it and  
14 I will -- we will -- we will figure if it is  
15 appropriate or whether it was or was not, or so on 02:04:06  
16 and so forth.

17 I was hoping it would be resolved herein,  
18 but it does not seem foreseeable.

19 MR. BLUME: Well, not -- yeah.

20 SPECIAL MASTER GARRIE: I understand, 02:04:15  
21 Counsel Blume, your position. I fully get it. I  
22 understand, Counsel Weaver, your position. I  
23 realize there's a fundamental issue there that will  
24 not be resolved during this break.

25 So everybody should go get lunch, and we 02:04:25

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1 will resume -- I was duly hopeful that I was 02:04:26  
2 misreading what I thought, but it is fine --  
3 MR. BLUME: Well, welcome your -- this  
4 question, as you --  
5 SPECIAL MASTER GARRIE: I mean, I thought 02:04:42  
6 that -- you know, fair enough. I think there's  
7 just a -- so we can take a break. Everybody get  
8 lunch. And we'll put a pin in it and we'll resume.  
9 MS. WEAVER: Okay. When do we want to  
10 get -- come back? 02:04:50  
11 MS. LAUFENBERG: We're still on the  
12 record, by the way.  
13 THE COURT REPORTER: Can we go off?  
14 THE VIDEOGRAPHER: Sure. We're off the  
15 record. It's 2:05 p.m. 02:05:01  
16 (Recess taken.)  
17 THE VIDEOGRAPHER: We're back on the  
18 record. It's 2:55 p.m.  
19 Q. (By Ms. Weaver) Hello, Mr. Clark.  
20 Did you have a good lunch? 02:55:21  
21 A. I did.  
22 Q. Okay. You know that you're still under  
23 oath, right?  
24 A. That is correct.  
25 Q. Okay. I'd like to ask you to just turn 02:55:29

1 back to Exhibit 81 [sic]. We never quite got done 02:55:32  
2 with it.

3 And for record, that's the 11-30-2011  
4 "Data/DeletionDeletedData" internal Wiki.

5 A. I don't have -- oh, 342? 02:55:49

6 MS. WEAVER: I'm sorry. 342, yes.

7 What did I say?

8 THE DEPONENT: 81. That's okay.

9 MS. WEAVER: Apologies.

10 Q. (By Ms. Weaver) And I'll direct your 02:56:01  
11 attention to the section here discussing  
12 "Anonymization," where it says -- we had just

13 [REDACTED]  
14 [REDACTED]

15 Do you recall that? 02:56:35

16 A. I see the paragraph.

17 Q. Yeah.

18 It's the paragraph where it identified

19 [REDACTED]

20 right? 02:56:50

21 A. Yup. Yes.

22 Q. Okay. And now look at the second  
23 paragraph there.

24 [REDACTED]

[REDACTED] 02:56:57

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[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Do you have an understanding of the

02:57:33

concept that even with some anonymization, content

of data can still identify a user?

MR. BLUME: Objection. Form.

THE DEPONENT: Can you ask that question

one more time. I was reading.

02:57:55

Q. (By Ms. Weaver) Sure. No problem.

Do you have an understanding of what this

paragraph is talking about, the sentences that I

just read?

MR. BLUME: Objection. Form. And scope.

02:58:02

THE DEPONENT: I do have an understanding

[REDACTED]

the examples in here. And the complexity in making

sure that that UII that's deleted is complete and

that there still isn't the ability to identify.

02:58:21

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1 Q. (By Ms. Weaver) "There still isn't the 02:58:27  
2 ability to identify"; is that what you said?

3 A. That -- that UII has been wiped.

4 Q. Okay.

5 A. That is -- that is what I said. 02:58:34

6 Q. And earlier, when we looked at  
7 Exhibit 348, you said that you would like to have  
8 seen the document at the hyperlink redirect the  
9 privacy UII definition; is that right?

10 A. That is correct, because that is what it 02:58:56  
11 actually says what is UII on that page.

12 MS. WEAVER: Okay. And I'll let counsel  
13 know, we've looked for this document and been  
14 unable to find it. So if you have it, we'd  
15 appreciate you producing it so that we can complete 02:59:06  
16 testimony about that topic.

17 MR. BLUME: Duly noted.

18 Q. (By Ms. Weaver) Looking a little lower,

19 [REDACTED]  
[REDACTED] 02:59:21

21 A. I do see that.

22 [REDACTED]  
23 Do you see that?

24 A. I do see that.

25 Q. And that's referring to user-generated 02:59:33

1 content, correct? 02:59:35

2 A. UGC means or -- or is an acronym for  
3 user-generated content, correct.

4 Q. And -- and what is that again?

5 A. That was content generated by the user. 02:59:48

6 So that -- that might have been information that  
7 they typed in the field. That might have been the  
8 post. A broadly user-generated content might  
9 include a photo or video as well.

10 Q. Okay. So why don't we turn to the second 03:00:03  
11 page of the document.

12 A. Okay.

13 Q. And I'll just point to the bottom there

14 [REDACTED] [REDACTED]  
[REDACTED] [REDACTED] [REDACTED]  
[REDACTED] [REDACTED]  
[REDACTED]  
[REDACTED] [REDACTED]  
[REDACTED]  
[REDACTED] [REDACTED]  
[REDACTED]  
[REDACTED] [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] [REDACTED] 03:00:52

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2

3

4

Do you see that?

5

A. I do see that.

03:01:04

6

7

Q. What does identity refer to in that paragraph?

8

MR. BLUME: Objection. Form. And scope.

9

10

THE DEPONENT: I -- I think this

document, as I mentioned earlier, is clearly the

03:01:14

11

editorial and writing of an individual engineer and

12

not necessarily a policy.

13

14

So when they say "identity," I -- I don't

know that I can necessarily interpret what that

15

engineer meant.

03:01:28

16

17

Q. (By Ms. Weaver) What does identity

mean -- mean at Facebook?

18

MR. BLUME: Objection. Form. And scope.

19

20

THE DEPONENT: I didn't -- I didn't

specifically prepare something for that, but I --

03:01:46

21

I -- the -- in general, from just my own personal

22

experience, the -- the term "identity" is,

23

you know, those things that can be -- I --

24

you know, it's the combination of the things that

25

identify back to me or -- or tie back to me.

03:02:04

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1 MS. WEAVER: Okay. I'll mark tab 58, 03:02:08  
2 please.  
3 (Exhibit 351 was marked for  
4 identification by the court reporter and is  
5 attached hereto.) 03:02:22  
6 MS. WEAVER: And for the record, while  
7 we're waiting for it, Exhibit 351 is  
8 Bates number FB-CA-MDL-01952478. And on the top it  
9 says "Privacy Eng."  
10 Q. (By Ms. Weaver) And let me know when you 03:03:00  
11 have Exhibit 351.  
12 A. Okay. I do not yet.  
13 It just came through.  
14 Q. Great. Thank you.  
15 A. Waiting for it to load. 03:03:40  
16 I have it.  
17 Q. And let me know when you've had a chance  
18 to look at it.  
19 A. Still reading through it.  
20 Q. That's okay. 03:05:09  
21 Did -- have you seen this document before  
22 today?  
23 A. I believe I saw this document before  
24 today.  
25 MS. WEAVER: And for the record, this is 03:05:18

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1 a document that we identified in our email to 03:05:22  
2 counsel.

3 THE DEPONENT: Yeah. That is where I  
4 would have seen it.

5 Okay. 03:05:29

6 Q. (By Ms. Weaver) What is Exhibit 351?

7 A. It appears to be a work chat or workplace  
8 communication.

9 I can't -- I can't tell. There's no  
10 context between Ethan Raymond and Scott Renfro and 03:05:58  
11 John Biesnecker.

12 Q. Who is Ethan Raymond?

13 A. I don't know.

14 Q. Okay. And, in general, what I'm focusing  
15 on in this document and relates just to definition 03:06:23  
16 of user identifiable information.

17 And the first question is, Ethan Raymond  
18 apparently is raising questions about what UII is.  
19 And do you see where he cites a couple internal Web  
20 links there. 03:06:43

21 Right in the very top of the page,

22 [REDACTED]

[REDACTED]

[REDACTED]

25 Do you see that? 03:06:55

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1 [REDACTED] 03:07:01

2 Q. Yes.

3 A. I do see that link, yes.

4 Q. Yes.

5 [REDACTED] [REDACTED]

6 [REDACTED] [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 Q. So -- I'm sorry.

13 [REDACTED]

14 [REDACTED]

15 [REDACTED] [REDACTED]

16 [REDACTED]

17 Q. And do you know --

18 A. The pieces --

19 Q. I'm sorry. I just can't -- I can't tell

20 when you're done speaking. I apologize. I'm not 03:07:48

21 trying to interrupt you.

22 A. A piece -- it's a -- it's a -- it's a

23 [REDACTED]

24 [REDACTED]

25 Q. And when did it first come into use? 03:08:01

1 A. I know that it's been around a while. I 03:08:10  
2 don't remember exactly when that tool started. I

3 [REDACTED]

4 Q. Yes.

5 And were you just looking for that answer 03:08:23  
6 in another document in front of you?

7 A. I was double-checking my notes from  
8 earlier this morning to see if I had made note of  
9 that.

10 Q. I see. Okay. 03:08:32

11 And what do you -- well, strike that.

12 [REDACTED]

13 [REDACTED]

14 MR. BLUME: Objection. Form. And scope.

15 THE DEPONENT: Well, as I'm reading this 03:08:47

16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 this document, these were separate examples where a

20 question was asked, do we have a standard and 03:09:11

21 comprehensive definition of exactly what PII is at

22 Facebook. I've looked at the following links which

23 give general definition of examples of PII.

24 [REDACTED]

25 [REDACTED] 03:09:25

1 [REDACTED] 03:09:29

2 Q. (By Ms. Weaver) I understand.

3 But apparently there was a document

4 [REDACTED]

5 [REDACTED] 03:09:47

6 MR. BLUME: Objection. Form. And scope.

7 THE DEPONENT: Once again, if I -- if I

8 look to the document, as this is written -- and I

9 want to make sure maybe that we're reading the same

10 thing. 03:09:57

11 At the -- towards the bottom of what

12 looks like a paragraph break, there is -- it says

13 [REDACTED]

14 [REDACTED]

15 [REDACTED] [REDACTED] [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 Q. (By Ms. Weaver) Right.

20 [REDACTED] [REDACTED]

21 [REDACTED] [REDACTED]

22 [REDACTED]

23 [REDACTED]

24 And then I see a third star, which would

25 [REDACTED] 03:10:36



1 [REDACTED] 03:10:40  
2 They're --  
3 Q. Right. I understand.  
4 And right before that third star, do you  
5 [REDACTED] 03:10:50  
6 A. I do. I see that as part of the URL.  
7 Q. Right.  
8 [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
15 Q. Understood. 03:11:27  
16 That's exactly what I was trying to lay  
17 out.  
18 [REDACTED]  
[REDACTED]  
20 right? 03:11:38  
21 A. Those are entirely separate bullets.  
22 [REDACTED]  
23 Q. Got it. Okay. Great. Moving on.  
24 A little bit lower, do you see --  
25 A. Yeah. 03:11:49

1 Q. -- where Scott Renfro wrote we -- 03:11:49

2 [REDACTED]

3 [REDACTED]

4 A. Yeah.

5 [REDACTED] [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 I switched those sentences around, but 03:12:17

11 you see them, right?

12 A. I do see them.

13 [REDACTED] [REDACTED] [REDACTED]

14 [REDACTED]

15 [REDACTED] [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 A. I do see that.

19 Q. Do you agree with that?

20 MR. BLUME: Objection. Form. Scope. 03:12:47

21 THE DEPONENT: I -- I do. And I actually

22 think this is -- I do want to -- I do want to call

23 out something specific in that sentence as well.

24 Because I think while we were talking about cookies

25 before the break, one of the things that's really 03:12:58

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1 important in the distinction here, that I did 03:13:01  
2 prepare for, are how cookie values are handled by  
3 the deletion process.

4 We don't store the cookies themselves.  
5 Cookies only exist on a Web browser. Whereas, the 03:13:11  
6 cookie values themselves, like when a -- like the  
7 datr cookie contains a set of information.

8 One of the pieces of information in there  
9 would be the datr key itself, which I talked about  
10 from my own personal experience. But in my 03:13:30  
11 preparation, when that key is stored and it is  
12 something that is potentially user identifiable,  
13 the handling of that would be UII as stated here.  
14 So this is consistent with my understanding.

15 Q. (By Ms. Weaver) Okay. And just to 03:13:45  
16 clarify the record, is it your understanding that

17 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

22 A. Yeah. The important qualification there  
23 being that "may identify someone."

24 Q. Okay. Great.

25 And then do you see a little lower, 03:14:13

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1 there's another message from Mr. Renfro at 03:14:18

2 7:42 a.m., and he says -- I'm sorry, at

3 1:28 p.m. -- it's very -- down at the bottom.

4 [REDACTED]

5 [REDACTED] 03:14:39

6 Do you see that?

7 A. I do see that.

8 [REDACTED]

9 MR. BLUME: Objection. Form.

10 Q. (By Ms. Weaver) You know, if you need to 03:15:17

11 read it, I can -- I -- I could try to sort of jump

12 ahead, but I can go back.

13 A. Yeah, I'm -- I'm -- I'm --

14 Q. That's fine.

15 A. -- reading the rest of the context, so... 03:15:23

16 Q. Yeah. Let me read it to you.

17 So at 7:42 a.m. Scott Renfro writes

18 [REDACTED]

19 [REDACTED]

20 [REDACTED]

21 [REDACTED]

22 Do you see that?

23 A. Yeah. I'm -- I am reading further up in

24 the document to make sure I've got the right

25 context for how this is being referred to. 03:15:44

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1 Q. Excellent. 03:15:46

2 And so the question, when you're ready,

3 [REDACTED]

4 MR. BLUME: Objection. Scope. Form.

5 And scope. I'm sorry. 03:16:12

6 THE DEPONENT: Yeah. My understanding of

7 [REDACTED]

8 [REDACTED] [REDACTED]

9 [REDACTED] [REDACTED]

10 [REDACTED] 03:17:39

11 How they are referring to it in this

12 context, I am unfortunately not familiar with.

13 Q. (By Ms. Weaver) Did you discuss this

14 with Mr. Renfro in preparation for your deposition?

15 A. We did not -- 03:17:50

16 (Court Reporter initiates discussion off

17 the stenographic record.)

18 THE COURT REPORTER: John, can you go off

19 the record?

20 THE VIDEOGRAPHER: Yeah. 03:18:11

21 We're off the record 3:18 p.m.

22 (Recess taken.)

23 THE VIDEOGRAPHER: Okay. Back on the

24 record. It's 3:19 p.m.

25 Q. (By Ms. Weaver) Great. 03:19:23

1 And so looking a little bit lower back to 03:19:25  
2 Mr. Renfro was writing at -- July 10th, at  
3 1:28 p.m.

4 [REDACTED]  
[REDACTED] [REDACTED] [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

12 Do you see that?

13 A. I do see that sentence or paragraph.

14 Q. [REDACTED]

15 MR. BLUME: Objection. Form. And scope. 03:20:10

16 THE DEPONENT: Based -- based on this  
17 paragraph, PII, as Scott had mentioned prior in  
18 this document -- Mr. Renfro -- has a variety of  
19 definitions.

20 [REDACTED] [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

25 Q. (By Ms. Weaver) Great. 03:21:01

1 And so looking at Exhibit 340, the "User 03:21:01  
2 Data Deletion Policy," when it refers to user data,  
3 we unfortunately have not been produced the  
4 document at the hyperlink to user data in  
5 Exhibit 340, and we just received this document -- 03:21:14  
6 I think they were loaded Saturday morning.

7 But for the -- what is your definition of  
8 user data, as used in this policy?

9 A. As used in this policy, I would expect it  
10 to include all user-generated content and user 03:21:42  
11 identifiable information.

12 Q. Does it include user identifiers as well?

13 A. As -- as I -- as I just said, it would  
14 include user-generated content and user  
15 identifiable information. And the -- the term 03:21:57  
16 "user identifiable information" implies that the --  
17 that the information itself could be used as  
18 identifiable to an individual.

19 Q. Right.

20 And just to be specific, and to be clear, 03:22:15

21 [REDACTED]

22 [REDACTED]

23 A. There is only one canonical user  
24 identifier that matters and that's the user ID,  
25 FBID, UID that -- the same single user identifier 03:22:38

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1 is the one that matters most. 03:22:44

2 And I couldn't answer the question  
3 identifiers just previously in -- in -- as that  
4 is -- that is too generic use of the term.

5 [REDACTED] [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] 03:23:14

11 Q. Is it user data?

12 MR. BLUME: Objection. Form.

13 THE DEPONENT: Can you ask a complete  
14 question. I want to make sure I understood the  
15 question you're asking. 03:23:37

16 Q. (By Ms. Weaver) Are the actual  
17 identifiers we just discussed, user data, do they  
18 fall within your definition of user data?

19 A. We just discussed two. So I want to make  
20 sure I'm answering the right ones. 03:23:51

21 [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] 03:24:13

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Q. Is the SID -- well, it's user data and

5

UII?

03:24:40

6

MR. BLUME: Objection. Form.

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8

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03:25:13

11

Q. (By Ms. Weaver) And is the ASID, UII or

12

user data?

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03:26:11

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13

Q. So -- I'm sorry.

14

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█

19

Q. Is the ASID still in use?

20

A. The ASID is still in use --

03:27:20

21

Q. And when was it --

22

A. -- to best of my knowledge.

23

Q. And when was it first used?

24

MR. BLUME: Objection. Form.

25

THE DEPONENT: As I didn't prepare for

03:27:36

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1 the third-party application as much, but rather, 03:27:37  
2 the use of those identifiers in deletion, I don't  
3 know that I prepared for that date. But I'm  
4 double-checking in my notes.

5 (Exhibit 352 was marked for 03:27:46  
6 identification by the court reporter and is  
7 attached hereto.)

8 MS. WEAVER: And while you're checking,  
9 we have marked as Exhibit 352, a document your  
10 counsel produced to us and said you would be 03:27:54  
11 prepared to discuss today.

12 It's bearing Bates number ADVANCE-META-8  
13 through -9, and the title is "App-Scoped ID (ASID)  
14 Conversions."

15 THE DEPONENT: I see that that document 03:28:16  
16 is loaded now.

17 Q. (By Ms. Weaver) Do you know when the  
18 ASID was first used at Facebook?

19 A. I'm still reading the document.

20 Q. I'm just -- before you're looking at the 03:28:29  
21 document, I'm just asking, do you know when the  
22 ASID was first used at Facebook?

23 A. I do not know when it was first used at  
24 Facebook.

25 Q. And if you were going to find out, how 03:28:38

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1 would you find out? 03:28:40

2 A. I would look to -- the -- the source of  
3 record would be the code -- the code associated  
4 with app source, app-scoped IDs.

5 Q. It's knowable, though, right? 03:29:07

6 MR. BLUME: Objection. Form.

7 THE DEPONENT: It should be.

8 Q. (By Ms. Weaver) Okay.

9 A. It should be.

10 Q. Take a moment and let me know when you've 03:29:13  
11 had a moment to look at Exhibit 352.

12 A. Okay.

13 Q. Did you review this document in  
14 preparation for your deposition?

15 A. I did. 03:30:25

16 Q. And what is it?

17 A. It is a Wiki page titled "App-Scoped ID  
18 (ASID) Conversions." It's Revision 24784904 in the  
19 Wiki.

20 Q. Okay. And do you see where it says 03:30:57

21 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

25 Do you see that? 03:31:09

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1 A. I do. 03:31:13

2 Q. And underneath that in a bullet point it

3 [REDACTED]

4 [REDACTED]

5 Do you see that? 03:31:21

6 A. I do see that.

7 Q. What is -- what is SEV?

8 A. That is a SEV.

9 Q. And what does it stand for?

10 A. It is -- it -- it is its own noun at 03:31:33

11 Facebook. And a SEV is an incident with some

12 level of -- there is a -- it is a -- it's -- it's

13 our system for tracking things that need to be

14 fixed, and a scale of prioritization attached to

15 it. 03:31:57

16 Q. Okay. And looking a little lower, do you

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 Do you see that? 03:32:17

21 A. I do see that.

22 Q. And that's why ASIDs were created; is  
23 that right?

24 A. That is my understanding, yes.

25 [REDACTED] 03:32:25

1

2

3

Do you see that?

4

A. I do see that.

5

Q. And is that true?

03:32:38

6

A. That is -- that is true.

7

Q. Okay. And a little lower it says

8

9

10

11

12

13

14

15

16

17

18

Do you see that?

19

A. I do see that.

20

Q. And is that true?

03:33:19

21

A. Is -- I -- the words that you read are --

22

are on the page, that is true.

23

I think what is -- I -- can you tell me

24

what you're asking?

25

Q. Yeah.

03:33:36

Page 181

1                   Is it true that if apps started sharing                   03:33:36  
2     data with each other, developers could start  
3     sharing and compiling data, which would violate  
4     users' privacy, and remove dependence on Facebook  
5     Growth and Ads, if developers just circumvent them?                   03:33:47

6           A.     Yeah.

7                   What I -- what I read this as is a  
8     theoretical explanation of how this could be  
9     exploited if somebody were to do this kind of  
10    mapping, and to reinforce the importance of why                   03:34:02  
11    this happens.

12                   This is consistent when -- this is the  
13    type of example that's written in regularly in  
14    security documentation and other things so that  
15    there is an understanding of what could be                   03:34:17  
16    exploited. So that people have an understanding of  
17    what they're trying to build defenses against when  
18    they're -- when they're building tools and  
19    safeguards.

20           Q.     Okay. And looking at the last page and                   03:34:29  
21    the last paragraph, do you see there's a sentence  
22    in bold?

23           A.     I do see that sentence in bold.

24           Q.     Could you read it, please.

25           A.     Sure.                   03:34:50

1 I'd like to read it in context. 03:34:50

2 [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 [REDACTED] [REDACTED] [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 THE COURT REPORTER: Hold on. Hold on. 03:35:09

11 THE DEPONENT: "At this point" --

12 THE COURT REPORTER: You're going to have  
13 to read slower, please.

14 THE DEPONENT: Oh.

15 THE COURT REPORTER: You need to read 03:35:17  
16 slower.

17 THE DEPONENT: Apologies. I can start  
18 over.

19 THE COURT REPORTER: No need. Just  
20 please read slower. 03:35:20

21 THE DEPONENT: Okay.

22 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] 03:35:42



1

2

3

4

5

03:35:58

6

Q. (By Ms. Weaver) And do you have an

7

understanding as to why ASIDs were created in the

8

first place?

9

10

11

12

13

14

15

16

17

18

19

20

03:37:00

21

(Exhibit 354 was marked for

22

identification by the court reporter and is

23

attached hereto.)

24

MS. WEAVER: We'll go ahead and mark

25

Exhibit 302 -- oh, strike that. Actually, tab 31.

03:37:18

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1                   And for the record, it's a rather large                   03:37:38  
2     file.  
3                   Tab 31 bears the  
4     Bates numbers PwC\_CPUP\_FB00020372 through -381.  
5                   And I'm only going to ask you questions                   03:37:53  
6     about some specific pages.  
7           A.     Okay.  
8                   What is the exhibit number again?  
9           Q.     I believe it will be 354.  
10                  But, again, it's large, so it's probably                   03:38:32  
11     taking a moment.  
12           A.     There it is.  
13                  I know this is on the record. It's  
14     really hard when the mouse scroll goes the opposite  
15     direction you're used to. Just have to, for the                   03:39:35  
16     record, say that.  
17           Q.     Are you left-handed or is it --  
18           A.     I'm -- I'm usually left-handed, but it's  
19     like when you scroll up, it goes down and in the  
20     opposite --                   03:39:46  
21           Q.     Oh, yeah. Let's get it --  
22           A.     I do have it open now.  
23           Q.     Great.  
24                  So you can flip through it.  
25                  The first question is, what is                   03:39:55

Page 185

1 Exhibit 354? 03:39:56

2 And I'll tell you, I'm going to ask

3 you -- well, let me know when you're ready.

4 A. Okay.

5 In answering the question of what this 03:42:05

6 is, it is an email from Spencer Kindt to

7 Louis C. Larrus. Spencer Kindt from Facebook,

8 Louis C. Larrus of PwC, dated 10/9/2013.

9 And I don't know whether the right phrase

10 would be montage or potpourri of code samples, 03:42:33

11 screenshots, emails, user ID, examples from a

12 cvikram. Content that was in a Box folder and the

13 PDF containing all the contents of that folder.

14 Q. Okay. And so is it fair to say that code

15 begins on or around page -1260 -- the page ending 03:43:01

16 at -1260 in the document?

17 MR. BLUME: Objection. Form.

18 THE DEPONENT: It depends on your

19 definition of code. There's a -- there's some code

20 on page 12 and 13. 03:43:23

21 Q. (By Ms. Weaver) When you say 12 and 13,

22 would you mind using the Bates number?

23 A. Oh, I apologize.

24 Q. No problem.

25 A. I'm using the page number. 03:43:34

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1 Q. Yeah. 03:43:36

2 A. There is a chronsript on  
3 Bates page -21261.

4 Q. Great.

5 A. And then actual page v code starting on 03:43:46  
6 -21262.

7 Q. What's a chronsript?

8 A. It's a script that runs on a -- on a  
9 regular basis with a schedule. And so it's -- it's  
10 a -- it's a scheduling tool for scheduling jobs. 03:44:05

11 [REDACTED]

12 MR. BLUME: Objection. Form.

13 THE DEPONENT: What I'm looking at on

14 [REDACTED]

15 [REDACTED] 03:44:28

16 that page. That was scheduled to run at 5 after  
17 2:00 a.m., 8:00 a.m., 2:00 p.m. and 8:00 p.m. every  
18 day.

19 Q. (By Ms. Weaver) Understood.

20 [REDACTED] 03:44:46

21 chronsript but runs routinely, or how does it run?

22 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] 03:45:01

1

3

Q. Okay. And how are they scheduled now?

4

A. I didn't specifically prepare for that.

5

But just -- it's -- we have more modern

03:45:17

6

tools that -- as -- as opposed to chronscripts that

7

ran in this way. So that we can monitor when they

8

start, that they start, validate that they start

9

and -- and get completions.

10

I just don't remember the name of the

03:45:29

11

tool that's built for that.

12

Q. Thank you.

13

And you said then code begins at

14

page -262; is that right?

15

A. That is correct.

03:45:39

16

Q. And what's your understanding of why code

17

was being provided to PwC here?

18

MR. BLUME: Objection. Form. Beyond the

19

scope.

20

THE DEPONENT: I -- I don't see any

03:45:51

21

context on -- the only context I see in the email

22

is "Here's the latest stuff from Box."

23

Q. (By Ms. Weaver) Okay. And are you

24

prepared to discuss today how data is associated

25

with users through pixels?

03:46:10

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1 MR. BLUME: Objection. Form. 03:46:19

2 THE DEPONENT: Could you be more  
3 specific in -- in the question.

4 Q. (By Ms. Weaver) I don't know how to be  
5 more specific. 03:46:28

6 A. Okay.

7 Q. The topic identified was -- included  
8 Facebook's processes of association of user data  
9 and information, and I had expressly emailed about  
10 pixels. 03:46:41

11 Are you prepared to talk about how pixels  
12 function?

13 A. Do you have -- if you've got a specific  
14 question, I can let you know if I'm prepared for  
15 that or not. I believe I'm prepared, but... 03:46:54

16 Q. Sure.

17 Turn to the Bates number ending in  
18 -303 -- I'm sorry. -305.

19 A. I'm at -305.

20 I will quickly read this. 03:47:42

21 Q. Sure.

22 A. Okay. I've read this page, which appears  
23 to be a proposal to the privacy XFN board.

24 [REDACTED]

[REDACTED] 03:49:25

1  
2  
3  
4  
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11  
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16  
17  
18  
19  
20  
21  
22  
23  
24  
25

[REDACTED]

[REDACTED] this document?

A. I'm not.

Q. Okay. 03:49:35

A. I have not come across that. I -- I also don't know if this was adopted or not, as this was a proposal.

Q. Okay. Why don't we turn to the page ending at -307. 03:49:49

A. Okay.

Okay.

Q. Do you need a second to review it?

A. I'm reviewing it right now.

Q. Are you familiar with the process of 03:50:33

[REDACTED]

[REDACTED]

A. I am in personal experience.

Q. And what do you know about it?

A. I know that we've -- for -- how I'm 03:51:02

familiar with it is how we've integrated in the past for types of privacy safe matching similar to what's proposed here is -- is -- is what's been my experience and what I'm familiar with it around it.

[REDACTED] 03:51:33

1 [REDACTED] 03:51:38  
2 [REDACTED]  
3 A. I do not know.  
4 MR. BLUME: Objection. Objection. Form.  
5 Q. (By Ms. Weaver) Do you know if it's 03:51:45  
6 still going on?  
7 MR. BLUME: Objection. Form. Scope.  
8 THE DEPONENT: I do not know.  
9 Q. (By Ms. Weaver) When data was received  
10 from data brokers and then matched to Facebook 03:51:58  
11 data, where did that data go and how -- and is it  
12 part of the deletion process?  
13 MR. BLUME: Objection. Form.  
14 THE DEPONENT: Third-party data for the  
15 deletion process has its -- has its own retention 03:52:24  
16 policy. It's also stored in a way that it  
17 itself is not directly identifiable but can only be  
18 matched with a series of hashes. And so it,  
19 itself, by itself, is not user identifiable, as  
20 it's stored, hashed in ways similar to what is 03:52:48  
21 described in this example.  
22 It would require there to be an exact UII  
23 that has been hashed to see if it matches with the  
24 existing hashed storage.  
25 Q. (By Ms. Weaver) And is that data then 03:53:08



1 associated with a specific user in a way such that 03:53:11  
2 if it were -- well -- is hash -- no, strike that.  
3 Is matched data re-associated with  
4 Facebook users through pseudonymize --  
5 pseudonymized identifiers at some point? 03:53:30  
6 MR. BLUME: Objection. Form. And scope.  
7 THE DEPONENT: The -- and just speaking  
8 from personal experience on that, the -- and to  
9 walk through and give a synthetic example of what a  
10 hash is, to help explain that, because I don't 03:54:02  
11 think I can answer that question -- and maybe you  
12 can ask it slightly different after I explain how a  
13 hash works.  
14 If my name is Mike and I hash that, that  
15 hash might end up with 7654321 as the number that 03:54:15  
16 represents what Mike was. That 7654321 is what  
17 would be stored. It is not UII. It's not  
18 identifiable.  
19 If I wanted to match, to see if something  
20 matched for Mike, I wouldn't be able to attach Mike 03:54:40  
21 and say that. I would need to generate a hash and  
22 then see if the hashes match.  
23 And so as 7654321 is not user  
24 identifiable, it wouldn't -- there -- there --  
25 it -- it wouldn't -- it would fall under natural 03:54:59

1 del- -- or retention policies, but would be stored 03:55:03  
2 in that context -- or in -- in its form. And there  
3 wouldn't be a need to de-identify it, as it's not  
4 user identifiable information in the hash itself.

5 And so could you clarify the question you 03:55:19  
6 were asking?

7 Q. (By Ms. Weaver) Is that data then, at  
8 some point, later re-associated with Facebook  
9 users?

10 MR. BLUME: Objection. Form. 03:55:43

11 THE DEPONENT: In this third-party data  
12 example, we wouldn't have the salt or the key to  
13 unlock the hashes. We would only be able to match  
14 if we had that same data and put it in a similar  
15 hash to then see if it matched. And so 03:56:05  
16 prohibitively by itself there isn't re-association  
17 on data itself in that form because we don't  
18 possess the key to it in the scenario that's --  
19 that's on the document in front of me.

20 Q. (By Ms. Weaver) Setting aside what's in 03:56:23  
21 the document in front of you, do you know if  
22 Facebook, at any point, acquired the key to be able  
23 to re-identify such data back to Facebook users?

24 MR. BLUME: Objection. Form. And scope.

25 THE DEPONENT: I'm not aware. 03:56:41

1 MS. WEAVER: Okay. Let's mark 03:56:45  
2 Exhibit 302 [sic]. And actually -- actually, while  
3 that's loading, mark tab 88.  
4 (Exhibit 355 was marked for  
5 identification by the court reporter and is 03:57:20  
6 attached hereto.)  
7 MS. WEAVER: Sorry, Josh. I hit you with  
8 two at once.  
9 THE DEPONENT: While those are loading,  
10 may I take a few-minute break? 03:57:37  
11 MS. WEAVER: Yes. Why don't we go off  
12 the record.  
13 THE VIDEOGRAPHER: Okay. We're off the  
14 record. It's 3:57 p.m.  
15 (Recess taken.) 03:58:01  
16 THE VIDEOGRAPHER: Okay. We're back on  
17 the record. It's 4:14 p.m.  
18 Q. (By Ms. Weaver) In -- Mr. Clark, you  
19 understand you're still under oath, correct?  
20 A. Yes, I do. Yes. 04:14:55  
21 MS. WEAVER: In your absence, we marked  
22 Exhibit 356.  
23 (Exhibit 356 was marked for  
24 identification by the court reporter and is  
25 attached hereto.) 04:15:01

1 MS. WEAVER: And for the record, it bears 04:15:03  
2 Bates numbers ADVANCE-META-23 to -25, and reads  
3 [REDACTED]  
4 THE DEPONENT: Okay.  
5 Q. (By Ms. Weaver) What is Exhibit 356? 04:15:16  
6 A. 356 is a Wiki page from the internal  
7 [REDACTED]  
8 [REDACTED] [REDACTED]  
9 Revision No. 51885342.  
10 Q. And what is -- and what does the document 04:15:47  
11 reflect, in general?  
12 A. It's talking about the -- as part of the  
13 overall deletion framework, there -- the -- the --  
14 just -- the workers of the deletion framework that  
15 actually do the deletion, from a software 04:16:03  
16 perspective, are called deleters. And this walks  
17 through -- talking through what deleters are and  
18 examples of what those deleters are.  
19 Q. And do you see a reference to "recording  
20 of restoration data" here? 04:16:19  
21 It's the second bullet.  
22 A. The second bullet under "What Do They  
23 Do?"  
24 Q. Yes.  
25 A. Yes, I do. 04:16:37

1	Q. What is the recording of restoration	04:16:37
---	---	----------

2	data?
---	-------

3. [REDACTED]

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

[illegible]

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

04:17:41

21 Q. Okay. Got it.

22 And looking, just for a second, back at

23 [REDACTED]

\_\_\_\_\_

04:18:01

1

2

3

MR. BLUME: Objection. Form.

4

THE DEPONENT: Could you -- could you ask

5

that one more time. And I'm -- I'm -- I want to

04:18:20

6

make sure I understand it.

7

8

9

10

11

try it again.

12

13

14

15

16

MR. BLUME: Objection. Form.

17

THE DEPONENT: Okay. It -- that feels

18

like two questions because I want to make sure I

19

answer that.

20

21

22

23

24

25

04:18:37

04:18:59

04:19:32

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1



1



1

1

04:21:22

Page 198

1 [REDACTED] 04:21:24

2 Q. (By Ms. Weaver) Okay. I guess my  
3 question was a little unclear.

4 At any point prior to the time the

5 [REDACTED] [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED] [REDACTED]

11 [REDACTED] [REDACTED]

12 [REDACTED]

13 Q. Okay. For the -- I'm going to ask some  
14 ugly questions, and then I'll try to clean it up  
15 later and try to communicate with you.

04:22:22

16 A. Okay.

17 Q. So what I'm trying to understand is --  
18 yes, let's limit it to the anonymized data in Hive,

19 [REDACTED]

20 [REDACTED] [REDACTED]

21 [REDACTED]

22 [REDACTED]

23 [REDACTED]

24 That's what I mean by perfect substitute.

25 Does that make sense?

04:22:49



1 MR. BLUME: Objection. Form. 04:22:51

2 THE DEPONENT: It -- I think it does.

3 And that scenario is intentionally -- like that  
4 that's why the product is architected the way it

5 [REDACTED] [REDACTED]

6 [REDACTED] [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 And so I -- the -- the scenario you're  
10 talking about is not part of what's engineered. 04:23:24

11 Q. (By Ms. Weaver) Right.

12 [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 fair? 04:23:56

16 MR. BLUME: Objection. Form.

17 THE DEPONENT: The -- that's more to --  
18 to tear apart there.

19 The -- when you say "all data," could --

20 Q. (By Ms. Weaver) Assume I'm talking about 04:24:10  
21 all the data --

22 A. Could we be specific and maybe --

23 Q. Sorry.

24 Assume I'm talking about all the data in

25 Hive, just for now, data warehouse. 04:24:16

1 A. Okay. Then please ask the question 04:24:18

2 again.

3 Q. Well, strike that.

4 [REDACTED]

5 MR. BLUME: Objection. Form. 04:24:27

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED] [REDACTED]

11 [REDACTED]

12 MR. BLUME: Objection. Form.

13 [REDACTED]

14 [REDACTED]

15 [REDACTED] [REDACTED]

16 [REDACTED]

17 MS. WEAVER: Thank you.

18 [REDACTED]

19 [REDACTED]

20 [REDACTED] [REDACTED]

21 [REDACTED]

22 [REDACTED]

23 MR. BLUME: Objection. Form.

24 THE DEPONENT: If by more difficult you

25 mean less efficient or technically feasible, it is 04:25:40

1

[REDACTED]

2

[REDACTED]

3

[REDACTED]

4

[REDACTED]

5

[REDACTED]

[REDACTED]

6

[REDACTED]

7

[REDACTED]

8

[REDACTED]

9

[REDACTED]

10

[REDACTED]

[REDACTED]

11

[REDACTED]

12

[REDACTED]

13

[REDACTED]

14

[REDACTED]

15

[REDACTED]

[REDACTED]

16

[REDACTED]

17

[REDACTED]

18

[REDACTED]

19

[REDACTED]

20

[REDACTED]

[REDACTED]

21

[REDACTED]

22

MS. WEAVER: Okay. Great.

23

Thank you.

24

25

/////

04:27:03

1 (Exhibit 357 was marked for 04:27:03  
2 identification by the court reporter and is  
3 attached hereto.)

4 (Exhibit 358 was marked for  
5 identification by the court reporter and is 04:27:03  
6 attached hereto.)

7 MS. WEAVER: Please take a look at  
8 Exhibits 357 and 358, which are actually associated  
9 with each other.

10 Exhibit -- for the record, Exhibit 357 is 04:27:14  
11 the email and family associated with the native  
12 file at Exhibit 358.

13 And for the record, these documents bear  
14 Bates numbers FB-CA-MDL-03233363 through -65.

15 And Exhibit 358 is the native file. And 04:27:42  
16 we're not going to put up Exhibit 358 on the  
17 screen, but it might be a little bit difficult for  
18 to navigate.

19 Actually, if we can put it on the screen  
20 that might be good. 04:28:00

21 Josh, do you want to try it? I know that  
22 you're freezing.

23 Q. (By Ms. Weaver) And I guess you might  
24 want to start with Exhibit 357, Mr. Clark. And  
25 I'll just ask you what is it, when you have a 04:28:30

1 chance. 04:28:33

2 A. Okay.

3 Apologies. This is taking a while.

4 There's a lot of content here.

5 Q. No problem. 04:30:18

6 A. All right. 357 appears to be an email

7 between Ayana Miller and Privacy PM, dated

8 September 9th, 2015, where Ayana, in sending to

9 [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED] 04:31:15

16 THE DEPONENT: Oh, I apologize for

17 reading that so fast.

18 Do you need me to redo that?

19 THE COURT REPORTER: No.

20 THE DEPONENT: Okay. 04:31:20

21 MS. WEAVER: She would have let you know  
22 probably.

23 But it's near the end, you'll both be  
24 happy to know.

25 Q. (By Ms. Weaver) Who -- who is 04:31:29

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1 Anna Ruecker; do you know her? 04:31:32

2 A. I do not.

3 Q. Okay. Do you know what a product

4 closeout reminder is?

5 MR. BLUME: Objection. Form and scope. 04:31:46

6 And I don't think this document was among

7 the ones you sent.

8 MS. WEAVER: That's because I just

9 received it. It was loaded on Saturday.

10 THE DEPONENT: I do not know what product 04:31:59

11 closeout reminder is for August. I can only

12 infer -- infer -- actually, I -- there's not enough

13 context in here to really infer what -- what that

14 means.

15 Q. (By Ms. Weaver) Okay. And turning to 04:32:11

16 the Excel spreadsheet.

17 A. Okay.

18 Is there a specific row?

19 Q. Sure. Let's start with row 8B.

20 A. The custom segment creation via 04:32:53

21 off-Facebook surveys?

22 Q. Yes.

23 A. Okay.

24 Q. And I'm actually looking at -- I'm trying

25 to identify the cell. So 8B, as in boy. 04:33:00

1 A. Understandable. 04:33:03

2 Q. Perfect.

3 And let me know when you've had a  
4 second -- a second to look at it.

5 A. Okay. 04:34:10

6 Q. What is a segment ID?

7 MR. BLUME: Objection. Form. Scope.

8 [REDACTED]  
9 something I had prepared or researched before this,  
10 and so I -- I don't specifically know what that's 04:34:35  
11 referring to in this context.

12 [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] 04:34:56

16 Is that a fair description of what it  
17 says in this cell?

18 A. That is a fair description of what it  
19 says in this cell.

20 Q. And then it says in the cell at step 2, 04:35:08

21 [REDACTED]  
[REDACTED]

23 Do you see that?

24 A. I do see No. 2, yes.

25 [REDACTED] 04:35:20

1

3

Do you see that?

4

A. I do see that.

5

Q. So do you know whether, in this scenario,

04:35:30

6

8

MR. BLUME: Objection. Form. And scope.

9

THE DEPONENT: I could not say -- I -- as

10

I don't know that answer.

04:35:47

11

Q. (By Ms. Weaver) So you're not -- that's

12

okay.

13

So you're not prepared to testify about

14

how Facebook associates the off-platform data to

15

the Facebook user ID; is that fair?

04:35:59

16

MR. BLUME: Objection. Form.

17

THE DEPONENT: In -- in the context of

18

deletion and off-Facebook associations on how this

19

would be stored, I'm prepared to talk about. I

20

just am not familiar with the specific scenario.

04:36:20

21

Q. (By Ms. Weaver) How does the Facebook

22

conversion pixel work?

23

MR. BLUME: Objection. Form. Scope.

24

THE DEPONENT: Is there a specific

25

question around that?

04:36:33

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1 Q. (By Ms. Weaver) Well, I identified data 04:36:34  
2 associated through the pixel in my email.

3 This specific example talks about how the  
4 partner under contract issues survey off Facebook  
5 with Facebook conversion pixel, and I'm wondering 04:36:49  
6 if you had the ability to testify as to how that  
7 functions?

8 MR. BLUME: Objection. Form.

9 THE DEPONENT: I -- I know it broadly in  
10 my own experience and -- and can talk to it 04:37:04  
11 generically. But I just am not familiar with this  
12 specific scenario.

13 Q. (By Ms. Weaver) Okay. What can you talk  
14 to generically?

15 MR. BLUME: Objection. Form. And scope. 04:37:17

16 THE DEPONENT: How I -- the -- the  
17 elements I can talk to and the elements I'm  
18 familiar with are what the IDs are that are stored  
19 and how -- how they are either pseudonymized or  
20 de-identified, or the information in the processes, 04:37:33  
21 and how that information is handled in the deletion  
22 process.

23 I don't think I'd be able to talk to  
24 enough specificity on an example like this.

25 Q. (By Ms. Weaver) Okay. Look at cell 14B, 04:37:51

1 as in boy. And while you're looking, I'll read it 04:37:54

2 into the record.

3 [REDACTED]

4 [REDACTED]

5 [REDACTED]

[REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED]

[REDACTED]

11 [REDACTED]

12 [REDACTED]

13 Do you see that in cell 14B?

14 A. I do see that in 14B.

15 Q. Are you familiar with how clean -- how

04:38:34

16 [REDACTED]

17 [REDACTED]

18 MR. BLUME: Objection. Form. And scope.

19 Q. (By Ms. Weaver) And if it helps, I'll

20 direct you to cell 14F, which refers to use of the

04:39:11

21 [REDACTED]

22 of this process.

23 A. I'm not familiar with this clean room

24 process.

25 Q. Do you know who may be -- oh, I'm sorry.

04:40:06

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1 Q. (By Ms. Weaver) And it says "To improve 04:42:08  
2 our machine translation systems, creating two sets  
3 of messages to pages."

4 Do you see that?

5 [REDACTED] [REDACTED]  
6 [REDACTED]

7 Do you have any involvement with that?

8 MR. BLUME: Objection. Scope.

9 THE DEPONENT: I do not. And I'm not  
10 familiar with that operating today. 04:42:43

11 Q. (By Ms. Weaver) Give me just two  
12 seconds.

13 [REDACTED]

14 A. Which line is that on?

15 Q. 7F. 04:43:14

16 MR. BLUME: Objection. Form. And scope.

17 THE DEPONENT: Not in preparation for  
18 this, but in -- just my normal -- is myself in --  
19 personal experience.

20 [REDACTED] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] 04:44:12

1

2

3

Q. (By Ms. Weaver) Okay. Look at --

4

A. The rest of -- the rest of this, I -- I'm

5

not familiar with.

04:44:25

6

Q. Okay. Apologies.

7

Look at row 6A.

8

Were you familiar with Facebook

9

10

04:44:38

11

MR. BLUME: Objection. Scope.

12

THE DEPONENT: I am not familiar with

13

that.

14

15

04:44:47

16

A. I do not know.

17

Q. Do you know who might know?

18

A. Edward Esslemont, the name in the sheet.

19

Q. Yeah.

20

Okay. What's a custom audience match

04:45:02

21

rate?

22

Do you know?

23

MR. BLUME: Objection. Scope.

24

THE DEPONENT: I didn't prepare for that

25

as part of this, and I -- I don't actually know

04:45:12

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1 what the custom audience match rate is. 04:45:15

2 MS. WEAVER: Okay. I think that's it. I

3 think we have no more -- further questions for this

4 witness. We are not closing the topic or the

5 notice. 04:45:33

6 Mr. Clark, thank you very, very much, and

7 I hope you feel better.

8 THE DEPONENT: Thank you.

9 THE VIDEOGRAPHER: Okay to go off the

10 record? 04:45:44

11 MS. WEAVER: Yes.

12 MR. BLUME: Are we off the record?

13 THE VIDEOGRAPHER: Okay. Sure. We're

14 off the record. It's 4:45 p.m.

15 (Recess taken.) 04:46:22

16 (Exhibit 359 was marked for

17 identification by the court reporter and is

18 attached hereto.)

19 THE VIDEOGRAPHER: We're back on record.

20 It's 4:57 p.m. 04:57:17

21 Q. (By Ms. Weaver) Mr. Clark, have you had

22 the opportunity to review what has been marked as

23 Exhibit 359?

24 MS. WEAVER: It bears Bates numbers

25 ADVANCE-META-66 through -69. 04:57:28

1                   And for the record, on the break,                   04:57:35  
2           counsels produced it to us. It was a document in  
3           the hyperlink of the earlier exhibit.

4                   THE DEPONENT: And for clarity, this is  
5           the link -- I just want to make sure I know what           04:57:47  
6           this is -- this is the linking from which  
7           Exhibit -- which earlier exhibit? It was the --

8                   MS. WEAVER: Exhibit 348.

9                   THE DEPONENT: 348.

10                  MS. WEAVER: Is that correct, Counsel?           04:58:00

11                  MR. BLUME: I trust you, but hang on.

12                  MS. WEAVER: Well, I don't know that this  
13           is the link.

14                  MR. BLUME: Yes, this is link -- yes.  
15           This is the link under what is -- UII redirect to           04:58:09  
16           link privacy/UII\_definition\_0 is -- the link --  
17           that link brings us to Exhibit 359.

18                  Q. (By Ms. Weaver) So Mr. Clark, what is  
19           Exhibit 359, in your understanding?

20                  A. Exhibit 359 is a Wiki page from the           04:58:35  
21           Facebook internal Wiki, titled "UII Definition,"  
22           Reversion 48265038.

23                  Q. And when was the last time you saw this  
24           document?

25                  A. Right now, as I'm looking at it.           04:59:01

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1 Q. Have you reviewed this link document 04:59:04  
2 before?  
3 A. I did not review this link document  
4 before today.  
5 Q. And do you understand this document to 04:59:18  
6 set forth --  
7 A. I -- I -- I want to correct the record.  
8 I've seen this before. I've used it in  
9 the course of business. But for the sake of  
10 preparation and deeper understanding. 04:59:26  
11 Q. That's what I was asking.  
12 So does Exhibit 359 set forth Facebook's  
13 definition of UII?  
14 A. It -- it is on the privacy Wiki as -- as  
15 the definition -- policy definition of UII. 04:59:51  
16 Q. And beginning at what point in time was  
17 this the definition for Facebook of UII?  
18 A. I'm going to refer just to my notes for a  
19 moment to see if I made note of that.  
20 I don't know when that shift occurred. I 05:00:30  
21 do know that as of 2010, we still referred to it as  
22 PII -- or we still -- we still used PIIs as the  
23 basis. It was some point after that where UII was  
24 adopted. I just do not know when.  
25 Q. And what's your understanding of the 05:00:45



1 distinction between PII and UII? 05:00:47

2 A. UII is Facebook's specific definition  
3 of -- which is broader than PII, which is adopted  
4 more industry-wide. But has specific meaning in  
5 the context of ads versus other types of  
6 industries.

05:01:09

7 And for our own sake built the definition  
8 of UII to be inclusive of the types of data and  
9 things that we had.

10 Q. So specifically, what is the definition? 05:01:25

11 A. UII, originally an acronym for user  
12 identifiable information, refers to types of data,  
13 or combinations of types of data, which could be  
14 used uniquely to identify a person, account, or  
15 device, or to relink data to a person, account or  
16 device.

05:01:41

17 Q. And do you have an understanding of what  
18 personal information is, in Facebook's view?

19 A. I'm -- I'm going to read from the  
20 document for that.

05:02:35

21 In the third paragraph, in the section

22 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

05:02:50

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1

2

3

4

5

6

7

8

9

10

Q. Personal --

05:03:37

11

A. "For example" --

12

Q. I'm sorry.

13

Go ahead.

14

A. "For" -- I'm just reading it slow to make

15

16

17

18

19

Q. Do you have an understanding that the

20

definition of personal information, under the

05:04:08

21

CCPAA, is any information that can be reasonably

22

linked or associated with an individual?

23

MR. BLUME: Objection. Calls for a legal

24

conclusion. Form.

25

THE DEPONENT: I -- I -- I -- that one, I

05:04:42

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1       can't answer that. But I can answer that I believe       05:04:43  
2       that's part of why we make UII even broader.

3           Q.     (By Ms. Weaver) Broader than what?

4           A.     Specific -- when you get to the  
5       definition of UII meaning both types of data, but       05:04:55  
6       combinations of types of data.

7           Q.     Okay. As you sit here today, can you  
8       state what personal information is under the CCPAA,  
9       as referenced in this document?

10           MR. BLUME: Objection. Form. Scope.       05:05:18  
11       Calls for a legal conclusion.

12           THE DEPONENT: I -- I can't quote the  
13       CCPA off the top of my head.

14           Q.     (By Ms. Weaver) So you don't know what  
15       the definition of "is personal information under       05:05:28  
16       the CCPA" as referenced in this document?

17           A.     As -- as I just am seeing this document  
18       for myself, I -- I'm familiar with personal  
19       information under CCPA, but just don't -- don't  
20       have that analysis or didn't prepare for -- to       05:05:45  
21       answer that question.

22           Q.     Do you know what personal infor- -- how  
23       personal information is defined under the CCPA?

24           MR. BLUME: Objection. Calls for a legal  
25       conclusion. Form. And scope.       05:06:03

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1 THE DEPONENT: I -- I don't know how to 05:06:15  
2 answer that.

3 I -- in -- in my personal experience, I  
4 would work with product counsel and counsel. And  
5 in that definition, I -- I -- as I said, I did not 05:06:24  
6 prepare to have an answer for that today.

7 Q. (By Ms. Weaver) Okay. So it's really --  
8 this really is very simple. It's a yes-or-no  
9 question.

10 As you sit here today, can you define 05:06:33  
11 personal information under the CCPA?

12 MR. BLUME: Same objections.

13 THE DEPONENT: I'm -- I'm truly  
14 struggling to answer that, but -- I have prepared  
15 context. But I can't answer yes or no to that. 05:06:43

16 Q. (By Ms. Weaver) Isn't the answer "no,"  
17 that you don't know, as you sit here today, how  
18 CCPA defines personal information?

19 A. I do in my personal experience and as I  
20 work as a product manager day-to-day, but I do so 05:06:57  
21 with guidance and direction from counsel. And I --  
22 I didn't -- I don't have a prepared answer or  
23 didn't prepare to answer it in this context.

24 Q. Well, what is your personal understanding  
25 of what personal information is under the CCPA? 05:07:11

1           A.     As I said, I've worked with counsel on                         05:07:32  
2     that.  I just -- I don't have it at the end of the  
3     day for you.

4                   If -- if you'd like to put it up, I can  
5       read what it is. I just -- I don't have that                   05:07:40  
6       answer right here in front of me.

7 Q. Okay. So that's fine.

8 | So the answer is you don't know, right?

9 MR. BLUME: Same objections.

10 THE DEPONENT: As a representative of 05:07:52  
11 Facebook, I didn't prepare to answer that. In my  
12 personal experience, I work with it. But I -- I  
13 just -- I can't articulate it right now. So I --

14 Q. (By Ms. Weaver) So the answer is, as you  
15 sit here right now, you don't know what the 05:08:11  
16 definition of personal information under the CCPA  
17 is, correct?

18 In your personal or in the corporate  
19 capacity; is that right?

20	MR. BLUME: Objection. Scope.	05:08:21
----	------------------------------	----------

21                   You can answer yes or no in your personal  
22    capacity.

23 THE DEPONENT: In -- in my personal  
24 capacity, I work with product counsel on a regular  
25 basis on the definition of what personal 05:08:31

1 information is under CCPA, which is a long and 05:08:33  
2 nuanced answer in the context of working with that  
3 data every day, because I have come up with and  
4 developed that definition under guidance and  
5 direction of counsel. 05:08:45

6 In my personal experience, I -- I -- I  
7 did not prepare to answer that question, so I  
8 cannot answer that I don't know.

9 Q. (By Ms. Weaver) Okay. Well, so -- we  
10 have a 30(b)(6) deposition here. You've asked for 05:09:03  
11 this document that refers to personal information  
12 under CCPA, which is part of the definition of UII,  
13 which is within the scope of what data is deleted,  
14 and I'm just answering -- I'm just asking, for  
15 the jury, can you tell me today, as you sit here, 05:09:20  
16 how does Facebook define personal information?

17 MR. BLUME: Objection. Form. And scope.  
18 And calls for a legal conclusion under the CCPA.

19 THE DEPONENT: And I -- I really am  
20 trying to be responsive. And that's why I'm making 05:09:39  
21 sure that it's on the record that I'm answering  
22 that I don't know. In --

23 Q. (By Ms. Weaver) Okay.

24 A. -- preparation for this, I came prepared  
25 to answer the things related to question 4. And 05:09:48

1 am -- am not counsel and can't make a legal 05:09:52  
2 conclusion to that.

3 Q. I'm not asking for a legal conclusion.  
4 I am asking for Facebook's understanding  
5 of what personal information is. 05:10:03

6 A. And as -- as I've already identified, it  
7 wasn't in the scope of what I prepared in the  
8 context of this deposition for the jury.

9 MS. WEAVER: And, Rob, why is it that you  
10 think the definition of personal information is not 05:10:23  
11 within the scope of user data and information?

12 MR. BLUME: It's defined in the CCPA,  
13 which is a statute, and that is the definition.  
14 Whether he can articulate it word for word or  
15 whether he refers to the CCPA's definition is what 05:10:37  
16 it is under the statute.

17 MS. WEAVER: I believe this is what --  
18 (Simultaneously speaking.)

19 MR. BLUME: That is the definition --

20 MS. WEAVER: Rob, if you listen to the 05:10:46  
21 question -- because you're objecting off point.  
22 Could you please read back --

23 MR. BLUME: Your -- your question was --

24 SPECIAL MASTER GARRIE: All right. Stop.  
25 We are not going off the rails. We are way too far 05:10:52

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1       into this today. 05:10:55

2               So read the question back.

3       Counsel Blume, if you want to respond, and you feel

4       you're responding, please do so. And we'll note

5       the objection for the record and we will then move 05:11:05

6       forward.

7               MS. WEAVER: The question is at page 196,

8       line 9.

9               MR. BLUME: Can you read it again?

10              SPECIAL MASTER GARRIE: 196. 05:11:31

11              MR. BLUME: The question I have is --

12              MS. WEAVER: I'm sorry. It's line 3.

13              MR. BLUME: Yeah, I'm -- I'm -- you're

14       asking me -- I'm happy to read the question.

15              "So the answer is, here right now, you 05:11:37

16       don't know what the definition of personal

17       information is" --

18              MS. WEAVER: Rob.

19              MR. BLUME: -- "under the CCPA; is that

20       correct?" 05:11:44

21              That's the question.

22              MS. WEAVER: Rob, it's line 3.

23              I'm not asking for a legal conclusion.

24       This is the question: What is Facebook's

25       understanding of what personal information is? 05:11:51



1 MR. BLUME: He said it was the CCPA. And 05:11:55  
2 that's a statute that you're --  
3 (Simultaneously speaking.)  
4 MS. WEAVER: Okay. But you're not  
5 testifying, Mr. Blume -- 05:11:59  
6 SPECIAL MASTER GARRIE: Wait. Wait.  
7 Everybody just -- for some reason you guys  
8 interpret my silence as a permission to keep  
9 talking.  
10 The objection is pending. I hear it. 05:12:06  
11 And we will go from there.  
12 Counsel Weaver, what was -- so I'm  
13 looking at this. You asked a question to the  
14 witness. The witness -- all right. It says "I'm  
15 not asking for a legal conclusion. I'm asking for 05:12:25  
16 Facebook's understanding of what the personal  
17 information.  
18 And then there's an answer.  
19 And what is your -- your -- and then --  
20 so help -- walk -- work with me. 05:12:36  
21 So what is the issue, Counsel Weaver?  
22 MS. WEAVER: I would like an answer to  
23 the question of what Facebook's understanding of  
24 personal information is.  
25 SPECIAL MASTER GARRIE: Okay. That is 05:12:46

1 the question that is pending to the witness. 05:12:48

2 Is there an objection, Counsel Blume?

3 MR. BLUME: The objection is to the  
4 extent it calls for a legal conclusion.

5 SPECIAL MASTER GARRIE: Noted -- 05:13:00

6 MR. BLUME: That is -- that's -- that's  
7 my objection.

8 SPECIAL MASTER GARRIE: Noted for the  
9 record.

10 Mr. Clark, please answer the question to 05:13:06  
11 the best of your ability.

12 THE DEPONENT: To -- to the best of my  
13 ability, as a representative of Facebook, I -- I  
14 didn't prepare for that in -- in the context of  
15 answering No. 4. 05:13:18

16 In my personal experience, the definition  
17 that I have, I have gotten in working under  
18 guidance and direction of counsel for the sake of  
19 product work. And -- and I -- I don't know what I  
20 can say and what I can't say. 05:13:39

21 I'm -- if -- if I were asked and even if  
22 I were read is the CCPA definition of this, this,  
23 then I could give an observation or factual answer,  
24 I could answer that. But understanding implies  
25 much more -- 05:14:03

1 SPECIAL MASTER GARRIE: Counsel Weaver, 05:14:05  
2 you can follow --  
3 THE DEPONENT: -- than what I had  
4 prepared.  
5 SPECIAL MASTER GARRIE: Go ahead. Sorry. 05:14:08  
6 I didn't mean to interrupt.  
7 THE DEPONENT: Oh, than -- than what I  
8 had prepared for.  
9 SPECIAL MASTER GARRIE: Counsel Weaver.  
10 MS. WEAVER: This is a fundamental 05:14:18  
11 question to the case and relates directly to the  
12 data that is deleted and collected by Facebook.  
13 What is Facebook's definition of personal  
14 information?  
15 I'm not asking for a legal conclusion. 05:14:27  
16 I'm just asking --  
17 SPECIAL MASTER GARRIE: Hey.  
18 MS. WEAVER: Yeah.  
19 SPECIAL MASTER GARRIE: The witness  
20 testified he's not prepared to answer that on 05:14:33  
21 behalf of Facebook as the witness -- I mean, I can  
22 read you back what he said, but -- I mean --  
23 MS. WEAVER: Okay. Well, I'll move on.  
24 Sanctionable.  
25 Q. (By Ms. Weaver) Looking at this 05:14:49

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1 document -- looking -- 05:14:50

2 MR. BLUME: Objection to the comment.

3 Q. (By Ms. Weaver) -- going -- looking --

4 Mr. Clark, do you see a bunch of Facebook

5 identifiers listed in this document? 05:14:56

6 A. I do.

7 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED]

[REDACTED]

[REDACTED] [REDACTED]

05:15:35

16 A. It --

17 Q. I'm sorry.

18 [REDACTED]

[REDACTED]

20 Q. And -- and back to the third-party 05:15:46

21 identifier you said we discussed earlier.

22 What are you referring to?

23 A. In one of the earlier documents we had

24 discussed -- we had referred to third-party ID, the

25 ephemeral third-party IDs. 05:16:03

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1 Q. You mean the IDs used in customer match? 05:16:09

2 A. No. These are -- these are

3 identifiers -- not just individual user

4 identifiers. These are identifiers of objects,

5 transactions, third parties. 05:16:21

6 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

13 Q. Is --

14 A. -- as Instagram has its own canonical

15 user -- as Instagram has its own canonical user ID, 05:16:56

16 this maps between the two.

17 Q. Understood.

18 And do you see where it says "Cookie

19 Identifiers" in this document?

20 A. I do. 05:17:10

21 Q. And it lists "BrowserID" and "DATR."

22 Do you see that?

23 A. I -- I do.

24 Q. How are they different?

25 A. BrowserID -- each Web browser generates

05:17:20

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1 its own unique browser ID. 05:17:22

2 DATR is the Facebook version of that  
3 unique identifier, as it's possible to spoof the  
4 BrowserID.

5 And then the first-party cookie 05:17:32  
6 identifiers would be some of the things which we  
7 had talked about before. The values associated  
8 with these cookie identifiers.

9 Q. And you said a moment ago that the  
10 Facebook identifiers we just discussed have changed 05:17:51  
11 since Facebook became Meta.

12 Which ones changed?

13 A. Sorry. I was -- to -- clarifying to make  
14 sure my statement was heard correctly.

15 This says Facebook identifiers. But that 05:18:04  
16 title of that category of Facebook identifiers, if  
17 updated, would say Meta identifiers, as this

18 [REDACTED]

19 [REDACTED]

20 just Facebook as an application. This is Facebook, 05:18:23  
21 as a company, in that line.

22 Q. Okay. And then it's --

23 A. Because it included WhatsApp and it  
24 included other products as well.

25 Q. Understood. 05:18:37

1                   Turning to the top of the next page, do                   05:18:37  
2           you see where it says "Device identifiers and  
3           Advertising Identifiers"?

4           A.    I do.

5           Q.    What is MS -- MISDN?                   05:18:45

6           A.    I think that's a typo.

7                   It says MISDN, but I believe it's MSISDN,  
8           which is an identifier -- it's a -- it's a hardware  
9           identifier on every phone.

10          Q.    Is it unique to -- to the -- every phone?           05:19:05

11          A.    I believe it is. I can't say with  
12          specificity. I just know that it's a -- it's a  
13          general unique device identifier that comes on  
14          device.

15          Q.    And what's an IDfv?                   05:19:19

16          A.    I remember the two I's. IDfv and IDFA as  
17          both being an iOS-related device identifiers.

18                   I don't know IDfv off the top of my head.

19          Q.    What's --

20          A.    I just know it's iOS-related.           05:19:34

21          Q.    What's the "Family Device IDs" referred  
22          to?

23          [REDACTED]

[REDACTED]

[REDACTED]

05:19:46

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[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

So it's identified as something that when

combined with something else could equal

re-identification, which is why it's identified as

05:20:28

UII.

Q. And then GAID, what is that?

A. I believe that's the Google ad ID.

Q. And AAID, what is that?

A. I think it's the Android ID, if I

05:20:43

remember correct.

Q. And then it says "or other OS or

Facebook-generated device IDs."

What other Facebook-generated device IDs

are you aware of?

05:20:57

A. Well, I didn't prepare for it

specifically. I didn't speak to my personal

capacity.

An example of Facebook-generated device

ID might be for my Oculus, or might be for --

05:21:07

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```
1 | it's -- it's Facebook-generated because it's 05:21:09
```

2	Facebook hardware.
---	--------------------

3 Q. And a little lower do you see where it

4 refers to "Derived data from UGC."

5	A. Yes.	05:21:32
---	---------	----------

6 Q. And it refers to hashes, embeddings and

```
7 | features or labels.
```

8	Do you see that?
---	------------------

9	A. I do.
---	----------

10	Q. What is an embedding?	05:21:42
----	--------------------------	----------

11 A. I'm reading the context, since that's a

12 technical term that could be used in a variety of

13	different ways.
----	-----------------

14 I actually don't know with specificity on

15	this page.	05:22:08
----	------------	----------

16 I can -- I would assume that this has to

17 do with any classification as that is -- that is

18 one of the common uses of that term.

19 But I -- I can't say with specificity

20 | what -- what that means in this context. I would 05:22:26

21 have to follow up.

22 Q. What do you mean by "classification"?

23 A. If -- if this were used in any machine

24 learning model or how that may have been used in

25 | that case is how I've seen that term used. 05:22:42

1 But as I said, I can't say with 05:22:45  
2 specificity in this case at this paragraph.

3 Q. Are all three categories of derived data  
4 described there stored in data warehouse?

5 A. All three of -- and this is in the 05:23:18  
6 derived data from UGC category. I want to make  
7 sure I'm answering the right question.

8 Q. Yes.

9 A. Yes, I would expect that.

10 Q. Is derived data not from UGC but from 05:23:27  
11 off-platform activity stored in data warehouse?

12 MR. BLUME: Objection. Form. Scope.

13 THE DEPONENT: Off-Facebook activity --  
14 can -- can you -- can you ask that question one  
15 more time. That was -- 05:23:46

16 Q. (By Ms. Weaver) Yes.

17 A. I got confused on the --

18 Q. Is derived data generated from  
19 off-platform activity stored in data warehouse?

20 MR. BLUME: Same objection. 05:23:56

21 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

05:24:17

Page 233

1

3

Q. (By Ms. Weaver) And when you say it is "transformed," what do you mean?

5

A. When data comes in from off-Facebook 05:24:30

6

activity, it comes in as log entries as -- as

7

data -- the -- the most efficient way to collect

8

that data is in -- in a raw logging format. And

9

then to do transforms which is -- an ETL

10

transformation of that data, which is a common 05:24:51

11

industry prac- -- practice to take raw log data and

12

put it into a usable fashion.

13

For instance, part of the result of that

14

transform is that data being made available to

15

consumers in -- in off-Facebook activity, which is 05:25:10

16

a tool on the Facebook site.

17

Q. When you say "put it into usable

18

fashion," what do you mean?

19

A. The data as it comes in is in a -- in a

20

raw log format. It's meant to be efficient from a 05:25:34

21

network perspective. It's meant to essentially

22

just be raw collection and not necessarily in a way

23

that it can be used. That -- that -- that data

24

would be -- might be in the JSON string. It might

25

be in a different kind of format. 05:25:54

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1 I don't specifically know what kind of 05:25:56  
2 format it's in. But it would be -- it wouldn't be  
3 meaningful to me, as a consumer, if I saw that  
4 activity on my OFA page without putting it into a  
5 format that could be queried and have a user 05:26:07  
6 interface put in front of it.

7 Q. Setting aside user interaction with the  
8 data, how does Facebook transform off-platform  
9 activity for its own use?

10 MR. BLUME: Objection. Form. Scope. 05:26:19

11 THE DEPONENT: Well, I didn't prepare for  
12 it -- specifically for -- as a representative of  
13 Facebook.

14 I -- just in my own capacity, that --

15 [REDACTED] [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] 05:26:55

21 MR. BLUME: Objection. Form. And scope.

22 [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] 05:27:09

Page 235

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[REDACTED]

[REDACTED]

[REDACTED]

Q. And would it still be, in some instances,  
associated with a user ID or other identifier?

MR. BLUME: Objection. Form. Scope.

05:27:30

THE DEPONENT: Just reiterating what

[REDACTED]

process and the processes in the data warehouse

and -- and also just from the definition of what we

just walked through, any of that information that

05:27:42

contained any of this UII, or if there was a user

ID or -- or one of the other -- or if there was a

[REDACTED]

[REDACTED]

[REDACTED]

05:27:59

Q. (By Ms. Weaver) And do you see the

[REDACTED]

[REDACTED]

[REDACTED]

Do you see that?

05:28:16

A. I'm scrolling down to that.

I do see that.

Q. And does that mean that in data  
warehouse -- which is Hive, correct?

A. That is correct.

05:28:35

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1 [REDACTED] 05:30:03

2 Q. How are blobs of files created, in  
3 general?

4 MR. BLUME: Objection. Form. Scope.

5 THE DEPONENT: In -- in my personal 05:30:17

6 experience, using -- using the pixel example, as

7 data comes back from pixel files, the data is

8 written into a raw log format. And tables are

9 merely sets of files that are written together and

10 it's -- that's how the structure, the physical 05:30:37

11 structure of how data gets written to disks.

12 MS. WEAVER: Great. Thank you.

13 Okay. This was very helpful. We really

14 are done, except that we are not closing the

15 deposition nor the topic. 05:30:52

16 Thank you very much for your time,

17 Mr. Clark.

18 MR. BLUME: And before -- before we go

19 off the record, Mr. Garrie, if I could be heard for

20 a moment. 05:30:59

21 MS. WEAVER: Let me just -- before you --

22 if you're about to launch into something else -- we

23 would request that counsel produce any documents

24 used to refresh the witness -- refresh the

25 witness's recollection in preparation for this 05:31:11

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1 deposition. 05:31:14

2 MR. BLUME: Refresh his recollection.

3 Okay. Presumably, if he didn't know it before the

4 deposition, then it wouldn't be refreshed. But

5 okay. 05:31:24

6 And Mr. Garrie, if I could be heard for a

7 moment.

8 SPECIAL MASTER GARRIE: Yes. Do you want

9 the witness to stay?

10 MR. BLUME: It doesn't matter. 05:31:34

11 SPECIAL MASTER GARRIE: Okay.

12 MS. WEAVER: It might matter to him.

13 MR. BLUME: He can go, if he wants.

14 THE DEPONENT: I'll be back.

15 MR. BLUME: I just -- I just want to make 05:31:44

16 sure that we're not chasing --

17 THE VIDEOGRAPHER: Did you want -- did

18 you want to go off the record or keep this on?

19 MR. BLUME: On -- on the record, please.

20 THE VIDEOGRAPHER: On the record. Okay. 05:31:53

21 MR. BLUME: To make sure that we're not

22 chasing windmills here.

23 The definition of personal information,

24 under the CCPA, which is the cite in this document

25 specifically, is about 330 words with three 05:32:06



1 sections and ten subsections referencing no fewer 05:32:13  
2 than three other statutes, including the California  
3 constitution.

4 And so to expect any witness, even a  
5 30(b)(6) witness, to recite all of that by memory 05:32:25  
6 is an unreasonable request when the definition,  
7 quote, personal information, close quote, as is set  
8 forth in Exhibit 359 has a specific cite as to what  
9 it means per the -- under the CCPA. And the CCPA,  
10 as I mentioned, has a very long and complicated 05:32:47  
11 definition of what that means.

12 And so claiming that he should not -- he  
13 should be able to recite it by memory, I think, is  
14 unreasonable. And it is also -- I will also note,  
15 as he testified to all day, the term "personal 05:33:04  
16 information" is not a necessary -- the definition  
17 of that is not necessary to understand this  
18 document. It's a comparative reference with the  
19 definition cited, should that comparison need to be  
20 made. But does not define the terms used by 05:33:21  
21 Facebook, which is UII and/or user data.

22 Thank you.

23 We have nothing further.

24 SPECIAL MASTER GARRIE: Well, I -- yeah,  
25 I -- again, I was just -- I was just processing 05:33:39

1       what was said. 05:33:41

2               Okay. Noted for the record.

3               But the definition of how Facebook

4       defines personal information, I would go with being

5       a critical concept for the -- the case as its 05:34:00

6       entirety. And so for Facebook, it may -- I'll

7       leave it to the parties, having read the

8       stipulation to -- having reserved all the time and

9       allocated accordingly -- to have this conversation

10       among themselves, but I would -- I would encourage 05:34:21

11       the idea of producing a witness that can define how

12       Facebook defines personal -- personal --

13               MR. BLUME: If I may, Your Honor --

14               SPECIAL MASTER GARRIE: -- information.

15               MR. BLUME: Yeah. If I may -- 05:34:36

16               MS. WEAVER: You're interrupting him.

17               MR. BLUME: How -- if I may, personal

18       information is defined by Facebook as it sets forth

19       in Exhibit 359. That is the definition under the

20       CCPA. Facebook does not use the term "personal 05:34:45

21       information." That's why we -- it -- as the

22       witness said, the Facebook term for that -- for

23       something that subsumes personal information is

24       UII. That is the term that Facebook uses. And

25       it's important to note, that as the document -- 05:35:03

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1                   SPECIAL MASTER GARRIE: But --                   05:35:07

2                   MR. BLUME: -- says, UII does not

3 directly map to personal information, so...

4                   SPECIAL MASTER GARRIE: Well, that's --

5 that's where I got confused.                   05:35:11

6                   So if someone who does know the CCPA and

7 the different articles and can recite it to you, I

8 have a serious concern with the very construct that

9 it subsumes the definition of personal information,

10 so I would expect that Facebook --                   05:35:21

11                  MR. BLUME: Well --

12                  (Simultaneously speaking.)

13                  SPECIAL MASTER GARRIE: -- can product a

14 witness -- don't interrupt me again. You interrupt

15 me again and we will have a problem.                   05:35:27

16                  MR. BLUME: Okay.

17                  SPECIAL MASTER GARRIE: Okay. Thank you.

18                  MR. BLUME: Okay.

19                  SPECIAL MASTER GARRIE: Thank you very

20 much.                   05:35:34

21                  So what I'm trying -- and what I was

22 saying is that it subsumes the definition.

23 Thereby, they must have some understanding of what

24 constitutes personal information.

25                  I have reviewed countless exhibits and                   05:35:44

1 materials your client has produced referencing 05:35:47  
2 personal information as a term and a concept.  
3 Whether or not you personally want to take a  
4 position on behalf of your client that they have no  
5 position as to what personal information is in the 05:35:58  
6 786-plus documents that I can cite to you that use  
7 the term "personal information" is a bit  
8 disconcerting to me.

9 But with that even said, I still expect  
10 that Facebook would feel incentivized to provide a 05:36:12  
11 witness that could attest to how it defines the  
12 concept of personal information, which is subsumed  
13 by this broader construct. Because I can't exactly  
14 understand how they are differentiating the two.  
15 And I read the exhibit and I heard the testimony. 05:36:28

16 So I advise you to take this under  
17 advisement accordingly before I order it. And I  
18 will encourage you again that whatever witness --  
19 if he's not prepared to testify as to how Facebook,  
20 as a corporate representative, defines personal 05:36:45  
21 information, that's noted for the record and will  
22 be reflected accordingly as one of your comments.

23 We're done. We're off the record.

24 MR. BLUME: All right. I do not mean --

25 SPECIAL MASTER GARRIE: Thank you very 05:36:58

1 much. 05:36:58

2 MR. BLUME: I did not mean subsumed. I

3 meant to read the document, which is directly --

4 does not directly map to personal information.

5 That is how we define the term. 05:37:06

6 SPECIAL MASTER GARRIE: Right. I know.

7 But it -- so I've read the documents, actually, all

8 of them. And there is -- if Facebook's position is

9 they cannot define what personal information is,

10 that is fine. 05:37:21

11 (Simultaneously speaking.)

12 MR. BLUME: That's not --

13 SPECIAL MASTER GARRIE: They can go on

14 the record -- all that was asked is how Facebook

15 defined personal information and he said he is not 05:37:28

16 prepared to testify to that.

17 I said that is fine. Right. I said that

18 is fine. I understand it was a concept of that

19 document. But the question was a broader question

20 asked by the attorney and the witness stated that 05:37:40

21 they were not prepared -- maybe there was

22 confusion. Maybe there wasn't. Fine.

23 My point is, is Facebook would -- I would

24 recommend find a witness that can define how

25 Facebook, the company, defines personal 05:37:55

1 information. That's it. 05:37:58

2 There's no further conversation.

3 MR. BLUME: Under- -- understood.

4 And with all due respect, it's -- he --

5 all he said was he couldn't reflect -- he couldn't 05:38:05

6 testify to the definition under the CCPA, which is

7 how it's referenced in this document. That is his

8 testimony.

9 SPECIAL MASTER GARRIE: Well, there was

10 actually multiple -- there -- there -- well, it 05:38:17

11 doesn't matter. The testimony is captured for the

12 record and -- and I read 196, line 3, accordingly,

13 with the subsequent six lines of answers, as well

14 as the four other references.

15 But that's neither here nor there. And I 05:38:27

16 will leave it in the hands of counsel to review it.

17 All I'm saying to Facebook is, find a

18 witness that can define what personal information

19 is, if there is not an agreement on this. Because

20 I get a lot of briefs from everybody citing to this 05:38:43

21 constructs of personal information and not personal

22 information, as does Judge Chhabria. And if your

23 client doesn't have a definition, we'd all like to

24 know.

25 So with that in mind, we're going to go 05:38:55

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1 off the record. Call it a wrap for the day and we 05:38:58  
2 will continue forward with other depositions.  
3 That's all I'm telling for the record. Okay. All  
4 done.

5 THE VIDEOGRAPHER: Okay. We're off the 05:39:11  
6 record. It's 5:39 p.m.

7 (TIME NOTED: 5:39 p.m.)  
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1 I, Rebecca L. Romano, a Registered  
2 Professional Reporter, Certified Shorthand  
3 Reporter, Certified Court Reporter, do hereby  
4 certify:

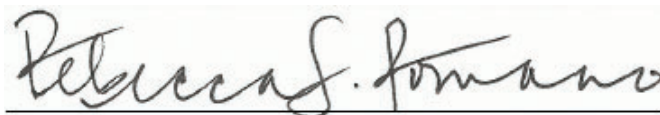
5 That the foregoing proceedings were taken  
6 before me remotely at the time and place herein set  
7 forth; that any deponents in the foregoing  
8 proceedings, prior to testifying, were administered  
9 an oath; that a record of the proceedings was made  
10 by me using machine shorthand which was thereafter  
11 transcribed under my direction; that the foregoing  
12 transcript is true record of the testimony given.

13 Further, that if the foregoing pertains to the  
14 original transcript of a deposition in a Federal  
15 Case, before completion of the proceedings, review  
16 of the transcript [ ] was [X] was not requested.

17 I further certify I am neither financially  
18 interested in the action nor a relative or employee  
19 of any attorney or any party to this action.

20 IN WITNESS WHEREOF, I have this date  
21 subscribed my name.

22 Dated: May 23, 2022

23   
24 \_\_\_\_\_

Rebecca L. Romano, RPR, CCR

25 CSR. No 12546



1 IN RE: FACEBOOK, INC.

2 Michael Patrick Clark, Volume I (JOB NO. 5210145)

3 E R R A T A S H E E T

4 PAGE 11 LINE 14 CHANGE PwC CPUP FB00020380 to

5 PwC CPUP FB00021380

6 REASON Misspoke

7 PAGE 33 LINE 5 CHANGE "a document" to "document"

8 REASON Mistranslation

9 PAGE 50 LINE 14 CHANGE "would be the technical term

10 the" to "would be the technical term"

11 REASON Mistranslation

12 PAGE 55 LINE 18 CHANGE "rereading" to "re-reading"

13 REASON Misspelling

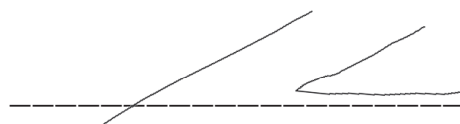
14 PAGE 58 LINE 22 CHANGE "UDDDB" to "UDDP"

15 REASON Mistranslation

16 PAGE 65 LINE 19 CHANGE "February of 2013" to

17 "February 2013"

18 REASON Mistranslation

19  
20  
21  
22  
23 

24 WITNESS

07/20/2022

25 Date

1 IN RE: FACEBOOK, INC.

2 Michael Patrick Clark, Volume I (JOB NO. 5210145)

3 E R R A T A S H E E T

4 PAGE 66 LINE 10 CHANGE "email was to know" to  
5 "email was, to know"

6 REASON Mistranslation

7 PAGE 67 LINE 15 CHANGE [REDACTED]

8 [REDACTED]  
9 REASON Mistranslation

10 PAGE 81 LINE 13 CHANGE "or our" to "are"

11 REASON Mistranslation

12 PAGE 86 LINE 3 CHANGE "a specific" to "a specific  
13 RID"

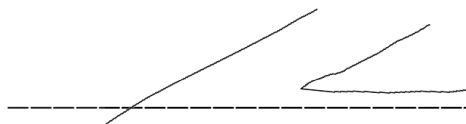
14 REASON Mistranslation

15 PAGE 90 LINE 17 CHANGE "go query to do that" to "go  
16 query, to do that"

17 REASON Mistranslation

18 PAGE 99 LINE 1 CHANGE "there" to "their"

19 REASON Mistranslation

20  
21  
22  
23 

24 WITNESS

07/20/2022

25 Date

IN RE: FACEBOOK, INC.

Michael Patrick Clark, Volume I (JOB NO. 5210145)

E R R A T A S H E E T

PAGE 99 LINE 16 CHANGE "in" to "am"

REASON Mistranslation

PAGE 101 LINE 9 CHANGE [REDACTED]

PAGE 101 LINE 12-13 CHANGE [REDACTED]

REASON Mistranslation

PAGE 124 LINE 20 CHANGE "when you were" to "Weaver"

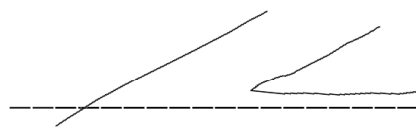
REASON Mistranslation

PAGE 131 LINE 8 CHANGE "in the epoch time" to "the epoch time"

REASON Mistranslation

PAGE 134 LINE 1 CHANGE "identify for users" to "identify if the user's"

REASON Mistranslation



WITNESS

07/20/2022

Date

1 IN RE: FACEBOOK, INC.

2 Michael Patrick Clark, Volume I (JOB NO. 5210145)

3 E R R A T A S H E E T

4 PAGE 138 LINE 5 CHANGE "has it was deleted" to "as  
5 it was deleted"

6 REASON Mistranslation

7 PAGE 141 LINE 8 CHANGE "active data [six]  
8 day count" to "active data count - day count"

9 REASON Mistranslation

10 PAGE 146 LINE 7 CHANGE "what is specific cookie" to  
11 "what a specific cookie"

12 REASON \_\_\_\_\_

13 PAGE 158 LINE 1 CHANGE "Exhibit 81 [sic]." to  
14 "Exhibit 81."

15 REASON Mistranslation

16 PAGE 175 LINE 6 CHANGE "because of after" to  
17 "because of, after"

18 REASON Mistranslation

19 PAGE 176 LINE 13 CHANGE "The apps go by D." to "The  
20 app-scoped ID."

21 REASON Mistranslation

22  
23  
24 WITNESS

\_\_\_\_\_  
Date

1 IN RE: FACEBOOK, INC.

2 Michael Patrick Clark, Volume I (JOB NO. 5210145)

3 E R R A T A S H E E T

4 PAGE 176 LINE 16-17 CHANGE "the apps go is by the"  
5 to "the app-scoped ID"

6 REASON Mistranslation

7 PAGE 184 LINE 14 CHANGE "that that" to "that, that"

8 REASON Mistranslation

9 PAGE 186 LINE 12 CHANGE "cvikram" to "script ran"

10 REASON Mistranslation

11 PAGE 194 LINE 2 CHANGE "Exhibit 302 [sic]." to  
12 "Exhibit 302."

13 REASON Mistranslation

14 PAGE 197 LINE 21 CHANGE "moment an UID" to "moment  
15 a UID"

16 REASON Mistranslation

17 PAGE 203 LINE 18 CHANGE "to navigate" to "you to  
18 navigate"

19 REASON Mistranslation

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23  
24 WITNESS

07/20/2022

Date

IN RE: FACEBOOK, INC.

Michael Patrick Clark, Volume I (JOB NO. 5210145)

E R R A T A S H E E T

PAGE 231 LINE 22 CHANGE "didn't speak" to "can  
speak"

REASON Mistranslation

PAGE 245 LINE 22 CHANGE "as does Judge Chhabria."  
to "as does Corley and Chhabria."

REASON \_\_\_\_\_

PAGE \_\_\_\_\_ LINE \_\_\_\_\_ CHANGE \_\_\_\_\_

REASON \_\_\_\_\_

PAGE \_\_\_\_\_ LINE \_\_\_\_\_ CHANGE \_\_\_\_\_

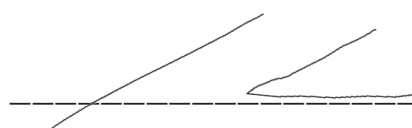
REASON \_\_\_\_\_

PAGE \_\_\_\_\_ LINE \_\_\_\_\_ CHANGE \_\_\_\_\_

REASON \_\_\_\_\_

PAGE \_\_\_\_\_ LINE \_\_\_\_\_ CHANGE \_\_\_\_\_

REASON \_\_\_\_\_



07/20/2022

WITNESS

Date

[&amp; - 30]

<b>&amp;</b>	<b>03233365</b> 12:7	<b>17</b> 26:20	<b>2015</b> 31:11 204:8
<b>&amp;</b> 1:14 2:19 3:5	<b>1</b>	<b>178</b> 11:4	<b>2017</b> 30:25 31:3
5:5 6:5 13:15,22	<b>1</b> 1:25 33:13 43:5	<b>18</b> 1:4,16 2:4,18	<b>2018</b> 166:3
167:13 249:23	55:1 167:13	13:1 249:5	<b>2019</b> 31:3
250:9	181:14 250:1	<b>1801</b> 5:9	<b>2020</b> 8:16 47:5,9
<b>0</b>	<b>10</b> 108:10,18,24	<b>184</b> 11:11	47:15 62:25
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